

Keysight  
Vector Network Analyzer  
Calibration Kit Standards Definitions

## Contents

85031B APC 7 Calibration Kit.....	3	85059B 1.00mm Precision 120 GHz Databased Calibration Kit.....	49
85032B/E Type N (50) Calibration Kit.....	4	N9910X-800 Type N (50)(m) 3-in-1 Calibration Kit .....	51
85032F Type N (50) Calibration Kit.....	6	N9910X-801 Type N (50)(f) 3-in-1 Calibration Kit .....	52
85033D/E 3.5 mm Calibration Kit.....	8	N9910X-802 7-16 (m) 3-in-1 Calibration Kit.....	53
85036B/E Type N (75) Calibration Kit.....	10	N9910X-803 7-16 (f) 3-in-1 Calibration Kit.....	54
85038A 7-16 Calibration Kit.....	12	85514A Type N (50)(m) 4-in-1 Calibration Kit.....	55
85039B Type F (75) Calibration Kit.....	14	85515A Type N (50)(f) 4-in-1 Calibration Kit.....	56
85050B APC 7 with Sliding Load Calibration Kit.....	16	85518A Type N (50)(m) 4-in-1 Calibration Kit.....	57
85050C APC 7 TRL Calibration Kit.....	18	85519A Type N (50)(f) 4-in-1 Calibration Kit.....	58
85050D APC 7 Calibration Kit .....	20	85520A 3.5 mm (m) 4-in-1 Calibration Kit .....	59
85052B 3.5 mm with Sliding Load Calibration Kit .....	21	85521A 3.5 mm (f) 4-in-1 Calibration Kit .....	60
85052C 3.5 mm SOLT/TRL Calibration Kit .....	23	85561A 2.92 mm (f) 4-in-1 Calibration Kit .....	61
85052D 3.5 mm Calibration Kit.....	25	85562A 2.92 mm (m) 4-in-1 Calibration Kit .....	62
85054B Type N (50) with Sliding Load Calibration Kit.....	27	85563A 2.4 mm (f) 4-in-1 Calibration Kit .....	63
85054D Type N (50) Calibration Kit .....	29	85564A 2.4 mm (m) 4-in-1 Calibration Kit .....	64
85056A 2.4 mm with Sliding Load Calibration Kit .....	31	Maury 8650S TNC Broadband Calibration Kit .....	65
85056D 2.4 mm Calibration Kit.....	33	X11644A X-Band Waveguide SOLT/TRL Calibration Kit.....	67
85056K 2.4 mm/2.92 mm with Broadband Load Calibration Kit.....	35	P11644A P-Band Waveguide SOLT/TRL Calibration Kit.....	69
85058B Databased 1.85 mm Precision Calibration Kit.....	37	K11644A K-Band Waveguide SOLT/TRL Calibration Kit.....	71
85058BP Polynomial 1.85 mm (Reduced Accuracy) Calibration Kit..	39	R11644A R-Band Waveguide SOLT/TRL Calibration Kit .....	73
85058E Databased 1.85 mm Economy Calibration Kit.....	41	Q11644A Q-Band Waveguide SOLT/TRL Calibration Kit .....	75
85058EP Polynomial 1.85 mm Economy (Reduced Accuracy) Calibration Kit.....	42	U11644A U-Band Waveguide SOLT/TRL Calibration Kit .....	77
85059A Databased 1.00 mm Precision Calibration Kit.....	44	V11644A V-Band Waveguide SOLT/TRL Calibration Kit.....	79
85059AP Polynomial 1.00 mm (Reduced Accuracy) Calibration Kit..	46	W11644A W-Band Waveguide SOLT/TRL Calibration Kit .....	81

## 85031B APC 7 Calibration Kit

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz^2	C3 F(e-45)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
2	OPEN	APC 7 open	APC 7	NONE	92.85	0	7.2	4.3	0	999000	0.00E+00	0.7	50

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz^2	L3 H(e-42)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
3	SHORT	APC 7 short	APC 7	NONE	0	0	0	0	0	999000	0.00E+00	0.7	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	BROADBAND	APC 7 broadband load	APC 7	NONE	FIXED	OFF	OFF	0	999000	0.00E+00	0.7	50

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
4	THRU	Insertable thru standard	APC 7	NONE	APC 7	NONE	0	999000	0.00E+00	0.7	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
APC 7	APC 7	NONE	COAX	0	999000	0

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	2							
S11B	3							
S11C	1							
S22A	2							
S22B	3							
S22C	1							
FWD MATCH	4							
FWD TRAN	4							
REV MATCH	4							
REV TRAN	4							
ISOLATION	1							

### TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU						
TRL REFLECT						
TRL LINE						
FWD MATCH						
REV MATCH						
ISOLATION	1					

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = THRU STANDARD

## 85032B/E Type N (50) Calibration Kit

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz^2	C3 F(e-45)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
2	OPEN -M-	Type N (50) male open	Type N (50)	MALE	62.14	-143.07	82.92	0.76	0	999000	1.74E-11	0.7	50
5	OPEN -F-	Type N (50) female open	Type N (50)	FEMALE	119.09	-36.955	26.258	5.5136	0	999000	0.00E+00	0.7	50

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz^2	L3 H(e-42)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
3	SHORT -M-	Type N (50) male short	Type N (50)	MALE	0	0	0	0	0	999000	1.78E-11	2.1002	50.209
6	SHORT -F-	Type N (50) female short	Type N (50)	FEMALE	0	0	0	0	0	999000	9.30E-14	0.7	49.992

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	BROADBAND LOAD -M-	Type N (50) male broadband load	Type N (50)	MALE	FIXED	OFF	OFF	0	999000	0.00E+00	0.7	50
4	BROADBAND LOAD -F-	Type N (50) female broadband load	Type N (50)	FEMALE	FIXED	OFF	OFF	0	999000	0.00E+00	0.7	50

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
7	THRU	Insertable thru standard	Type N (50)	FEMALE	Type N (50)	MALE	0	999000	0.00E+00	0.7	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
Type N (50)	Type N (50) male	MALE	COAX	0	999000	0
Type N (50)	Type N (50) female	FEMALE	COAX	0	999000	0

## 85032B/E Type N (50) Calibration Kit (continued)

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	2	5						
S11B	3	6						
S11C	1	4						
S22A	2	5						
S22B	3	6						
S22C	1	4						
FWD MATCH	7							
FWD TRAN	7							
REV MATCH	7							
REV TRAN	7							
ISOLATION	1	4						

### TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU						
TRL REFLECT						
TRL LINE						
FWD MATCH						
REV MATCH						
ISOLATION	1	4				

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = THRU STANDARD

## 85032F Type N (50) Calibration Kit

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz <sup>2</sup>	C3 F(e-45)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
8	OPEN -M-	Type N (50) male open	Type N (50)	MALE	89.939	2536.800	-264.990	13.400	0	999000	4.0856 E-11	0.93	50
2	OPEN -F-	Type N (50) female open	Type N (50)	FEMALE	89.939	2536.800	-264.990	13.400	0	999000	4.1170 E-11	0.93	50

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz <sup>2</sup>	L3 H(e-42)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
7	SHORT -M-	Type N (50) male short	Type N (50)	MALE	3.3998	-496.4808	34.8314	-0.7847	0	999000	4.5955 E-11	1.087	49.992
1	SHORT -F-	Type N (50) female short	Type N (50)	FEMALE	3.3998	-496.4808	34.8314	-0.7847	0	999000	4.5955 E-11	1.087	49.99

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
3	BROADBAND LOAD -M-	Type N (50) male broadband load	Type N (50)	MALE	FIXED	OFF	OFF	0	999000	0.00E+00	0	50
6	BROADBAND LOAD -F-	Type N (50) female broadband load	Type N (50)	FEMALE	FIXED	OFF	OFF	0	999000	0.00E+00	0	50

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
4	THRU	Insertable thru standard	Type N (50)	FEMALE	Type N (50)	MALE	0	999000	0.00E+00	0	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
Type N (50)	Type N (50) male	MALE	COAX	0	999000	0
Type N (50)	Type N (50) female	FEMALE	COAX	0	999000	0

## 85032F Type N (50) Calibration Kit (continued)

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	8	2						
S11B	7	1						
S11C	3	6						
S22A	8	2						
S22B	7	1						
S22C	3	6						
FWD MATCH	4							
FWD TRAN	4							
REV MATCH	4							
REV TRAN	4							
ISOLATION	3	6						

### TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU						
TRL REFLECT						
TRL LINE						
FWD MATCH						
REV MATCH						
ISOLATION	3	6				

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = THRU STANDARD

## 85033D/E 3.5 mm Calibration Kit

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz^2	C3 F(e-45)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
2	OPEN -M-	3.5 mm male open	APC 3.5	MALE	49.433	-310.13	23.168	-0.15966	0	999000	2.92E-11	2.2	50
5	OPEN -F-	3.5 mm female open	APC 3.5	FEMALE	49.433	-310.13	23.168	-0.15966	0	999000	2.92E-11	2.3	50

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz^2	L3 H(e-42)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
3	SHORT -M-	3.5 mm male short	APC 3.5	MALE	2.0765	-108.54	2.1705	-0.01	0	999000	3.18E-11	2.36	50
6	SHORT -F-	3.5 mm female short	APC 3.5	FEMALE	2.0765	-108.54	2.1705	-0.01	0	999000	3.18E-11	2.36	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	BROADBAND LOAD -M-	3.5 mm male broadband load	APC 3.5	MALE	FIXED	OFF	OFF	0	999000	0.00E+00	2.3	50
4	BROADBAND LOAD -F-	3.5 mm female broadband load	APC 3.5	FEMALE	FIXED	OFF	OFF	0	999000	0.00E+00	0	50

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
7	THRU	Insertable thru standard	APC 3.5	FEMALE	APC 3.5	MALE	0	999000	0.00E+00	2.3	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
APC 3.5	APC 3.5 male	MALE	COAX	0	999000	0
APC 3.5	APC 3.5 female	FEMALE	COAX	0	999000	0



## 85033D/E 3.5 mm Calibration Kit (continued)

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	2	5						
S11B	3	6						
S11C	1	4						
S22A	2	5						
S22B	3	6						
S22C	1	4						
FWD MATCH	7							
FWD TRAN	7							
REV MATCH	7							
REV TRAN	7							
ISOLATION	1	4						

### TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU						
TRL REFLECT						
TRL LINE						
FWD MATCH						
REV MATCH						
ISOLATION	1	4				

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = THRU STANDARD

## 85036B/E Type N (75) Calibration Kit

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz <sup>2</sup>	C3 F(e-45)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
6	OPEN -M-	Type N (75) male open	Type N (75)	MALE	41	40	5	0	0	999000	1.75E-11	1.13	75
2	OPEN -F-	Type N (75) female open	Type N (75)	FEMALE	63.5	84	56	0	0	999000	0.00E+00	1.13	75

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz <sup>2</sup>	L3 H(e-42)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	SHORT -M-	Type N (75) male short	Type N (75)	MALE	0	0	0	0	0	999000	1.75E-11	1.13	75
5	SHORT -F-	Type N (75) female short	Type N (75)	FEMALE	0	0	0	0	0	999000	9.30E-13	1.13	75

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
3	BROADBAND LOAD -M-	Type N (75) male broadband load	Type N (75)	MALE	FIXED	OFF	OFF	0	999000	0.00E+00	1.13	75
7	BROADBAND LOAD -F-	Type N (75) female broadband load	Type N (75)	FEMALE	FIXED	OFF	OFF	0	999000	0.00E+00	1.13	75

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
4	THRU	Insertable thru standard	Type N (75)	FEMALE	Type N (75)	MALE	0	999000	0.00E+00	1.13	75

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
Type N (75)	Type N (75) male	MALE	COAX	0	999000	0
Type N (75)	Type N (75) female	FEMALE	COAX	0	999000	0

## 85036B/E Type N (75) Calibration Kit (continued)

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	6	2						
S11B	1	5						
S11C	3	7						
S22A	6	2						
S22B	1	5						
S22C	3	7						
FWD MATCH	4							
FWD TRAN	4							
REV MATCH	4							
REV TRAN	4							
ISOLATION	3	7						

### TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU						
TRL REFLECT						
TRL LINE						
FWD MATCH						
REV MATCH						
ISOLATION	3	7				

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = THRU STANDARD

## 85038A 7-16 Calibration Kit

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz <sup>2</sup>	C3 F(e-45)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
2	OPEN -M-	7-16 male open	7-16	MALE	32	100	-50	100	0	999000	6.67E-11	0.63	50
5	OPEN -F-	7-16 female open	7-16	FEMALE	32	100	-50	100	0	999000	6.67E-11	0.63	50

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz <sup>2</sup>	L3 H(e-42)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
3	SHORT -M-	7-16 male short	7-16	MALE	0	0	0	0	0	999000	6.67E-11	0.63	50
6	SHORT -F-	7-16 female short	7-16	FEMALE	0	0	0	0	0	999000	6.67E-11	0.63	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	BROADBAND LOAD -M-	7-16 male broadband load	7-16	MALE	FIXED	OFF	OFF	0	999000	0.00E+00	0	50
4	BROADBAND LOAD -F-	7-16 female broadband load	7-16	FEMALE	FIXED	OFF	OFF	0	999000	0.00E+00	0	50

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
7	THRU	Insertable thru standard	7-16	FEMALE	7-16	MALE	0	999000	0.00E+00	2.2	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
7-16	7-16 male	MALE	COAX	0	999000	0
7-16	7-16 female	FEMALE	COAX	0	18600	0

## 85038A 7-16 Calibration Kit (continued)

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	2	5						
S11B	3	6						
S11C	1	4						
S22A	2	5						
S22B	3	6						
S22C	1	4						
FWD MATCH	7							
FWD TRAN	7							
REV MATCH	7							
REV TRAN	7							
ISOLATION	1	4						

### TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU						
TRL REFLECT						
TRL LINE						
FWD MATCH						
REV MATCH						
ISOLATION	1	4				

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = THRU STANDARD

## 85039B Type F (75) Calibration Kit

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz <sup>2</sup>	C3 F(e-45)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
2	OPEN -M-	Type F (75) male open	Type F (75)	MALE	42.945	98.367	706.93	-114.957	0	999000	5.36E-11	1.64	75
5	OPEN -F-	Type F (75) female open	Type F (75)	FEMALE	42.945	98.367	706.93	-114.957	0	999000	5.36E-11	1.64	75

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz <sup>2</sup>	L3 H(e-42)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
3	SHORT -M-	Type F (75) male short	Type F (75)	MALE	0	0	0	0	0	999000	5.70E-11	1.8	75
6	SHORT -F-	Type F (75) female short	Type F (75)	FEMALE	0	0	0	0	0	999000	5.70E-11	1.8	75

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	FIXED LOAD -M-	Type F (75) male fixed load	Type F (75)	MALE	FIXED	OFF	OFF	0	999000	0.00E+00	1.13	75
4	FIXED LOAD -F-	Type F (75) female fixed load	Type F (75)	FEMALE	FIXED	OFF	OFF	0	999000	0.00E+00	1.13	75

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
7	THRU	Insertable thru standard	Type F (75)	FEMALE	Type F (75)	MALE	0	999000	0.00E+00	1.13	75

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
Type F (75)	Type F (75) male	MALE	COAX	0	999000	0
Type F (75)	Type F (75) female	FEMALE	COAX	0	999000	0

## 85039B Type F (75) Calibration Kit (continued)

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	2	5						
S11B	3	6						
S11C	1	4						
S22A	2	5						
S22B	3	6						
S22C	1	4						
FWD MATCH	7							
FWD TRAN	7							
REV MATCH	7							
REV TRAN	7							
ISOLATION	1	4						

### TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU						
TRL REFLECT						
TRL LINE						
FWD MATCH						
REV MATCH						
ISOLATION	1	4				

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = THRU STANDARD

## 85050B APC 7 with Sliding Load Calibration Kit

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz^2	C3 F(e-45)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
4	OPEN	APC 7 open	APC 7	NONE	90.4799	763.303	-63.8176	6.4337	0	999000	0.00E+00	0	50

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz^2	L3 H(e-42)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
5	SHORT	APC 7 short	APC 7	NONE	0.3566	-33.392	1.7542	-0.0336	0	999000	0.00E+00	0	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	LOWBAND LOAD	APC 7 lowband load	APC 7	NONE	FIXED	OFF	OFF	0	2000	0.00E+00	0.7	50
2	SLIDING LOAD	APC 7 sliding load	APC 7	NONE	SLIDING	OFF	OFF	1990	999000	0.00E+00	1.99	50
3	BROADBAND LOAD	APC 7 broadband load	APC 7	NONE	FIXED	OFF	OFF	0	999000	0.00E+00	0	50

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
6	THRU	Insertable thru standard	APC 7	NONE	APC 7	NONE	0	999000	0.00E+00	0	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
APC 7	APC 7	NONE	COAX	0	999000	0



## 85050B APC 7 with Sliding Load Calibration Kit (continued)

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	4							
S11B	5							
S11C	1	2	3					
S22A	4							
S22B	5							
S22C	1	2	3					
FWD MATCH	6							
FWD TRAN	6							
REV MATCH	6							
REV TRAN	6							
ISOLATION	1	2	3					

### TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU						
TRL REFLECT						
TRL LINE						
FWD MATCH						
REV MATCH						
ISOLATION	1	2	3			

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = THRU STANDARD

## 85050C APC 7 TRL Calibration Kit

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz <sup>2</sup>	C3 F(e-45)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
3	OPEN	APC 7 open	APC 7	NONE	90.4799	763.303	-63.8176	6.4337	0	999000	0.00E+00	0	50

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz <sup>2</sup>	L3 H(e-42)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
4	SHORT	APC 7 short	APC 7	NONE	0.3566	-33.392	1.7542	-0.0336	0	999000	0.00E+00	0	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	BROADBAND	APC 7 broadband load	APC 7	NONE	FIXED	OFF	OFF	0	999000	0.00E+00	0	50
2	LOWBAND LOAD	APC 7 lowband load	APC 7	NONE	FIXED	OFF	OFF	0	2000	0.00E+00	0.7	50

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
5	THRU	Insertable thru standard	APC 7	NONE	APC 7	NONE	0	999000	0.00E+00	0	50
6	LINE	2-18 line standard	APC 7	NONE	APC 7	NONE	1990	20010	2.319E-11	0.7	49.988

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
APC 7	APC 7	NONE	COAX	0	999000	0

## 85050C APC 7 TRL Calibration Kit (continued)

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	3							
S11B	4							
S11C	1	2						
S22A	3							
S22B	4							
S22C	1	2						
FWD MATCH	5	6						
FWD TRAN	5	6						
REV MATCH	5	6						
REV TRAN	5	6						
ISOLATION	1	2						

### TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU	5					
TRL REFLECT	4					
TRL LINE	6					
FWD MATCH	1	2				
REV MATCH	1	2				
ISOLATION	1	2				

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = THRU STANDARD

## 85050D APC 7 Calibration Kit

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz^2	C3 F(e-45)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
2	OPEN	APC 7 open	APC 7	NONE	90.4799	763.303	-63.8176	6.4337	0	999000	0.00E+00	0.7	50

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz^2	L3 H(e-42)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
3	SHORT	APC 7 short	APC 7	NONE	0.3566	-33.392	1.7542	-0.0336	0	999000	0.00E+00	0.7	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	BROADBAND	APC 7 broadband load	APC 7	NONE	FIXED	OFF	OFF	0	999000	0.00E+00	0.7	50

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
4	THRU	Insertable thru standard	APC 7	NONE	APC 7	NONE	0	999000	0.00E+00	0.7	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
APC 7	APC 7	NONE	COAX	0	999000	0

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	2							
S11B	3							
S11C	1							
S22A	2							
S22B	3							
S22C	1							
FWD MATCH	4							
FWD TRAN	4							
REV MATCH	4							
REV TRAN	4							
ISOLATION	1							

### TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU						
TRL REFLECT						
TRL LINE						
FWD MATCH						
REV MATCH						
ISOLATION	1					

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = THRU STANDARD

## 85052B 3.5 mm with Sliding Load Calibration Kit

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz^2	C3 F(e-45)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
2	OPEN -M-	3.5 mm male open	APC 3.5	MALE	49.433	-310.13	23.168	-0.15966	0	999000	2.9243 E-11	2.2	50
15	OPEN -F-	3.5 mm female open	APC 3.5	FEMALE	49.433	-310.13	23.168	-0.15966	0	999000	2.9243 E-11	2.2	50

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz^2	L3 H(e-42)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	SHORT -M-	3.5 mm male short	APC 3.5	MALE	2.0765	-108.54	2.1705	-0.01	0	999000	3.1785 E-11	2.36	50
7	SHORT -F-	3.5 mm female short	APC 3.5	FEMALE	2.0765	-108.54	2.1705	-0.01	0	999000	3.1785 E-11	2.36	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
6	LOWBAND LOAD -M-	3.5 mm male lowband load	APC 3.5	MALE	FIXED	OFF	OFF	0	3001	0.00E+00	0	50
5	SLIDING LOAD -M-	3.5 mm male sliding load	APC 3.5	MALE	SLIDING	OFF	OFF	2990	999000	0.00E+00	0	50
3	BROADBAND LOAD -M-	3.5 mm male broadband load	APC 3.5	MALE	FIXED	OFF	OFF	0	999000	0.00E+00	0	50
12	LOWBAND LOAD -F-	3.5 mm female lowband load	APC 3.5	FEMALE	FIXED	OFF	OFF	0	3001	0.00E+00	0	50
13	SLIDING LOAD -F-	3.5 mm female sliding load	APC 3.5	FEMALE	SLIDING	OFF	OFF	2999	999000	0.00E+00	0	50
14	BROADBAND LOAD -F-	3.5 mm female broadband load	APC 3.5	FEMALE	FIXED	OFF	OFF	0	999000	0.00E+00	0	50

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
4	THRU	Insertable thru standard	APC 3.5	FEMALE	APC 3.5	MALE	0	999000	0.00E+00	0	50

## 85052B 3.5 mm with Sliding Load Calibration Kit (continued)

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
APC 3.5	APC 3.5 male	MALE	COAX	0	999000	0
APC 3.5	APC 3.5 female	FEMALE	COAX	0	999000	0

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	2	15						
S11B	1	7						
S11C	6	5	3	12	13	14		
S22A	2	15						
S22B	1	7						
S22C	6	5	3	12	13	14		
FWD MATCH	4							
FWD TRAN	4							
REV MATCH	4							
REV TRAN	4							
ISOLATION	6	5	3	12	13	14		

### TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU						
TRL REFLECT						
TRL LINE						
FWD MATCH						
REV MATCH						
ISOLATION	6	5	3	12	13	14

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = THRU STANDARD

## 85052C 3.5 mm SOLT/TRL Calibration Kit

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz <sup>2</sup>	C3 F(e-45)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
3	OPEN -M-	3.5 mm male open	APC 3.5	MALE	49.433	-310.13	23.168	-0.15966	0	999000	2.9243 E-11	2.2	50
4	OPEN -M-	3.5/2.92 mm male open	APC 3.5	MALE	6.9558	-1.0259	-0.01435	0.0028	0	999000	2.9243 E-11	2.3	50
5	OPEN -M-	3.5 mm/SMA male open	APC 3.5	MALE	5.9588	-11.195	0.5076	-0.00243	0	999000	2.9243 E-11	2.3	50
6	OPEN -M-	2.92 mm/SMA male open	APC 3.5	MALE	13.4203	-1.9452	0.5459	0.01594	0	999000	2.9243 E-11	2.3	50
10	OPEN -F-	3.5 mm female open	APC 3.5	FEMALE	49.433	-310.13	23.168	-0.15866	0	999000	2.9243 E-11	2.3	50
11	OPEN -F-	3.5/2.92 mm female open	APC 3.5	FEMALE	6.9558	-1.0259	-0.01435	0.0028	0	999000	2.9243 E-11	2.3	50
12	OPEN -F-	3.5 mm/SMA female open	APC 3.5	FEMALE	5.9588	-11.195	0.5076	-0.00243	0	999000	2.9243 E-11	2.3	50
13	OPEN -F-	2.92 mm/SMA female open	APC 3.5	FEMALE	13.4203	-1.9452	0.5459	0.01594	0	999000	2.9243 E-11	2.3	50

Std. No.	Label	Description	Connector	Sex	L0 H( E-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz <sup>2</sup>	L3 H(e-42)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
7	SHORT -M-	3.5 mm male short	APC 3.5	MALE	2.0765	-108.54	2.1705	-0.01	0	999000	3.1785 E-11	2.36	50
14	SHORT -F-	3.5 mm female short	APC 3.5	FEMALE	2.0765	-108.54	2.1705	-0.01	0	999000	3.1785 E-11	2.36	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	Broadband Load -M-	3.5 mm male broadband load	APC 3.5	MALE	FIXED	OFF	OFF	0	38800	0.00E+00	0	50
2	0-2 Load -M-	0-2 GHz male low band load	APC 3.5	MALE	FIXED	OFF	OFF	0	2000	0.00E+00	0	50
8	Broadband Load -F-	3.5 mm female broadband load	APC 3.5	FEMALE	FIXED	OFF	OFF	0	38800	0.00E+00	0	50
9	0-2 Load -F-	0-2 GHz female low band load	APC 3.5	FEMALE	FIXED	OFF	OFF	0	2000	0.00E+00	0	50

## 85052C 3.5 mm SOLT/TRL Calibration Kit (continued)

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
15	THRU	Insertable thru standard	APC 3.5	FEMALE	APC 3.5	MALE	0	38800	0.00E+00	0	50
16	7-32 Line	7-32 TRL line standard	APC 3.5	FEMALE	APC 3.5	MALE	6999	32001	1.3013E-11	1.3	50
17	2-7 Line	2-7 TRL line standard	APC 3.5	FEMALE	APC 3.5	MALE	1000	7001	5.3988E-11	1.3	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
APC 3.5	APC 3.5 male	MALE	COAX	0	999000	0
APC 3.5	APC 3.5 female	FEMALE	COAX	0	999000	0

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	3	4	5	6	10	11	12	13
S11B	7	14						
S11C	1	2	8	9				
S22A	3	4	5	6	10	11	12	13
S22B	7	14						
S22C	1	2	8	9				
FWD MATCH	15							
FWD TRAN	15							
REV MATCH	15							
REV TRAN	15							
ISOLATION	1	2	8	9				

### TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU	15					
TRL REFLECT	7	14				
TRL LINE	1	2	8	9	16	17
FWD MATCH	1	2	8	9		
REV MATCH	1	2	8	9		
ISOLATION	1	2	8	9		

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = THRU STANDARD



## 85052D 3.5 mm Calibration Kit

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz^2	C3 F(e-45)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
2	OPEN -M-	3.5 mm male open	APC 3.5	MALE	49.433	-310.13	23.168	-0.15966	0	999000	2.9243 E-11	2.2	50
15	OPEN -F-	3.5 mm female open	APC 3.5	FEMALE	49.433	-310.13	23.168	-0.15966	0	999000	2.9243 E-11	2.2	50

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz^2	L3 H(e-42)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	SHORT -M-	3.5 mm male short	APC 3.5	MALE	2.0765	-108.54	2.1705	-0.01	0	999000	3.1785 E-11	2.36	50
7	SHORT -F-	3.5 mm female short	APC 3.5	FEMALE	2.0765	-108.54	2.1705	-0.01	0	999000	3.1785 E-11	2.36	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
3	BROADBAND LOAD -M-	3.5 mm male broadband load	APC 3.5	MALE	FIXED	OFF	OFF	0	999000	0.00E+00	0	50
14	BROADBAND LOAD -F-	3.5 mm female broadband load	APC 3.5	FEMALE	FIXED	OFF	OFF	0	999000	0.00E+00	0	50

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
4	THRU	Insertable thru standard	APC 3.5	FEMALE	APC 3.5	MALE	0	999000	0.00E+00	0	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
APC 3.5	APC 3.5 male	MALE	COAX	0	999000	0
APC 3.5	APC 3.5 female	FEMALE	COAX	0	999000	0

## 85052D 3.5 mm Calibration Kit (continued)

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	2	15						
S11B	1	7						
S11C	3	14						
S22A	2	15						
S22B	1	7						
S22C	3	14						
FWD MATCH	4							
FWD TRAN	4							
REV MATCH	4							
REV TRAN	4							
ISOLATION	3	14						

### TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU						
TRL REFLECT						
TRL LINE						
FWD MATCH						
REV MATCH						
ISOLATION	3	14				

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = THRU STANDARD

## 85054B Type N (50) with Sliding Load Calibration Kit

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz^2	C3 F(e-45)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
4	OPEN -M-	Type N (50) male open	Type N (50)	MALE	89.939	2536.7999	-264.9901	13.4	0	999000	5.7993 E-11	0.93	50
9	OPEN -F-	Type N (50) female open	Type N (50)	FEMALE	104.13	-1943.4008	144.62	2.2258	0	999000	2.2905 E-11	0.93	50

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz^2	L3 H(e-42)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
5	SHORT -M-	Type N (50) male short	Type N (50)	MALE	0.7563	459.8799	-52.429	1.5846	0	999000	6.3078 E-11	1.1273	50
10	SHORT -F-	Type N (50) female short	Type N (50)	FEMALE	-0.1315	606.2089	-68.405	2.0206	0	999000	2.799 E- 11	1.3651	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	LOWBAND LOAD -M-	Type N (50) male lowband load	Type N (50)	MALE	FIXED	OFF	OFF	0	2001	0.00E+00	0	50
2	SLIDING LOAD - M-	Type N (50) male sliding load	Type N (50)	MALE	SLIDING	OFF	OFF	1990	999000	0.00E+00	0	50
3	BROADBAND LOAD -M-	Type N (50) male broadband load	Type N (50)	MALE	FIXED	OFF	OFF	0	999000	0.00E+00	0	50
6	LOWBAND LOAD -F-	Type N (50) female lowband load	Type N (50)	FEMALE	FIXED	OFF	OFF	0	2001	0.00E+00	0	50
7	SLIDING LOAD - F-	Type N (50) female sliding load	Type N (50)	FEMALE	SLIDING	OFF	OFF	1990	999000	0.00E+00	0	50
8	BROADBAND LOAD -F-	Type N (50) female broadband load	Type N (50)	FEMALE	FIXED	OFF	OFF	0	999000	0.00E+00	0	50

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
11	THRU	Insertable thru standard	Type N (50)	FEMALE	Type N (50)	MALE	0	999000	0.00E+00	2.2	50

## 85054B Type N (50) with Sliding Load Calibration Kit (continued)

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
Type N (50)	Type N (50) male	MALE	COAX	0	999000	0
Type N (50)	Type N (50) female	FEMALE	COAX	0	999000	0

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	4	9						
S11B	5	10						
S11C	1	2	3	6	7	8		
S22A	4	9						
S22B	5	10						
S22C	1	2	3	6	7	8		
FWD MATCH	11							
FWD TRAN	11							
REV MATCH	11							
REV TRAN	11							
ISOLATION	1	2	3	6	7	8		

### TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU						
TRL REFLECT						
TRL LINE						
FWD MATCH						
REV MATCH						
ISOLATION	1	2	3	6	7	8

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = THRU STANDARD

## 85054D Type N (50) Calibration Kit

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz <sup>2</sup>	C3 F(e-45)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
2	OPEN -M-	Type N (50) male open	Type N (50)	MALE	89.939	2536.7999	-264.9901	13.4	0	999000	5.7993 E-11	0.93	50
5	OPEN -F-	Type N (50) female open	Type N (50)	FEMALE	104.13	-1943.4008	144.62	2.2258	0	999000	2.2905 E-11	0.93	50

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz <sup>2</sup>	L3 H(e-42)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
3	SHORT -M-	Type N (50) male short	Type N (50)	MALE	0.7563	459.8799	-52.429	1.5846	0	999000	6.3078 E-11	1.1273	50
6	SHORT -F-	Type N (50) female short	Type N (50)	FEMALE	-0.1315	606.2089	-68.405	2.0206	0	999000	2.799 E- 11	1.13651	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	BROADBAND LOAD -M-	Type N (50) male broadband load	Type N (50)	MALE	FIXED	OFF	OFF	0	999000	0.00E+00	0	50
4	BROADBAND LOAD -F-	Type N (50) female broadband load	Type N (50)	FEMALE	FIXED	OFF	OFF	0	999000	0.00E+00	0	50

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
7	THRU	Insertable thru standard	Type N (50)	FEMALE	Type N (50)	MALE	0	999000	0.00E+00	2.2	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
Type N (50)	Type N (50) male	MALE	COAX	0	999000	0
Type N (50)	Type N (50) female	FEMALE	COAX	0	999000	0

## 85054D Type N (50) Calibration Kit (continued)

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	2	5						
S11B	3	6						
S11C	1	4						
S22A	2	5						
S22B	3	6						
S22C	1	4						
FWD MATCH	7							
FWD TRAN	7							
REV MATCH	7							
REV TRAN	7							
ISOLATION	1	4						

### TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU						
TRL REFLECT						
TRL LINE						
FWD MATCH						
REV MATCH						
ISOLATION	1	4				

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = THRU STANDARD

## 85056A 2.4 mm with Sliding Load Calibration Kit

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz <sup>2</sup>	C3 F(e-45)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
4	OPEN -M-	2.4 mm male open	APC 2.4	MALE	29.722	165.78	-3.5386	0.071	0	999000	2.0837 E-11	3.23	50
9	OPEN -F-	2.4 mm female open	APC 2.4	FEMALE	29.72	165.78	-3.5385	0.071	0	999000	2.0837 E-11	3.23	50

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz <sup>2</sup>	L3 H(e-42)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
5	SHORT -M-	2.4 mm male short	APC 2.4	MALE	2.1636	-146.35	4.0443	-0.0363	0	999000	2.2548 E-11	3.554	50
10	SHORT -F-	2.4 mm female short	APC 2.4	FEMALE	2.1636	-146.35	4.0443	-0.0363	0	999000	2.2548 E-11	3.554	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	LOWBAND LOAD -M-	2.4 mm male lowband load	APC 2.4	MALE	FIXED	OFF	OFF	0	4001	0.00E+00	0	50
2	SLIDING LOAD -M-	2.4 mm male sliding load	APC 2.4	MALE	SLIDING	OFF	OFF	3999	999000	0.00E+00	0	50
3	BROADBAND LOAD -M-	2.4 mm male broadband load	APC 2.4	MALE	FIXED	OFF	OFF	0	999000	0.00E+00	0	50
6	LOWBAND LOAD -F-	2.4 mm female lowband load	APC 2.4	FEMALE	FIXED	OFF	OFF	0	4001	0.00E+00	0	50
7	SLIDING LOAD -F-	2.4 mm female sliding load	APC 2.4	FEMALE	SLIDING	OFF	OFF	3999	999000	0.00E+00	0	50
8	BROADBAND LOAD -F-	2.4 mm female broadband load	APC 2.4	FEMALE	FIXED	OFF	OFF	0	999000	0.00E+00	0	50

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
11	THRU	Insertable thru standard	APC 2.4	FEMALE	APC 2.4	MALE	0	999000	0.00E+00	3.554	50

## 85056A 2.4 mm with Sliding Load Calibration Kit (continued)

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
APC 2.4	APC 2.4 male	MALE	COAX	0	999000	0
APC 2.4	APC 2.4 female	FEMALE	COAX	0	999000	0

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	4	9						
S11B	5	10						
S11C	1	2	3	6	7	8		
S22A	4	9						
S22B	5	10						
S22C	1	2	3	6	7	8		
FWD MATCH	11							
FWD TRAN	11							
REV MATCH	11							
REV TRAN	11							
ISOLATION	1	2	3	6	7	8		

### TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU						
TRL REFLECT						
TRL LINE						
FWD MATCH						
REV MATCH						
ISOLATION	1	2	3	6	7	8

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = THRU STANDARD



## 85056D 2.4 mm Calibration Kit

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz <sup>2</sup>	C3 F(e-45)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
2	OPEN -M-	2.4 mm male open	APC 2.4	MALE	29.722	165.78	-3.5386	0.071	0	999000	2.0837 E-11	3.23	50
6	OPEN -F-	2.4 mm female open	APC 2.4	FEMALE	29.72	165.78	-3.5385	0.071	0	999000	2.0837 E-11	3.23	50

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz <sup>2</sup>	L3 H(e-42)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	SHORT -M-	2.4 mm male short	APC 2.4	MALE	2.1636	-146.35	4.0443	-0.0363	0	999000	2.2548 E-11	3.554	50
7	SHORT -F-	2.4 mm female short	APC 2.4	FEMALE	2.1636	-146.35	4.0443	-0.0363	0	999000	2.2548 E-11	3.554	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
3	BROADBAND LOAD -M-	2.4 mm male broadband load	APC 2.4	MALE	FIXED	OFF	OFF	0	999000	0.00E+00	0	50
5	BROADBAND LOAD -F-	2.4 mm female broadband load	APC 2.4	FEMALE	FIXED	OFF	OFF	0	999000	0.00E+00	0	50

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
4	THRU	Insertable thru standard	APC 2.4	FEMALE	APC 2.4	MALE	0	999000	0.00E+00	3.554	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
APC 2.4	APC 2.4 male	MALE	COAX	0	999000	0
APC 2.4	APC 2.4 female	FEMALE	COAX	0	999000	0

## 85056D 2.4 mm Calibration Kit (continued)

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	2	6						
S11B	1	7						
S11C	3	5						
S22A	2	6						
S22B	1	7						
S22C	3	5						
FWD MATCH	4							
FWD TRAN	4							
REV MATCH	4							
REV TRAN	4							
ISOLATION	3	5						

### TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU						
TRL REFLECT						
TRL LINE						
FWD MATCH						
REV MATCH						
ISOLATION	3	5				

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = THRU STANDARD

## 85056K 2.4 mm/2.92 mm with Broadband Load Calibration Kit

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz <sup>2</sup>	C3 F(e-45)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
4	OPEN -M-	2.4 mm male open	2.92 mm	MALE	29.722	165.78	-3.5385	0.071	0	46500	-1.8842 E-11	4.47	50
13	OPEN -F-	2.4 mm female open	2.92 mm	FEMALE	29.722	165.78	-3.5385	0.071	0	46500	-1.8842 E-11	4.47	50

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz <sup>2</sup>	L3 H(e-42)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
9	SHORT -M-	2.4 mm male short	2.92 mm	MALE	2.1636	-146.35	4.0443	-0.0363	0	46500	-1.7128 E-11	4.16	50
18	SHORT -F-	2.4 mm female short	2.92 mm	FEMALE	2.1636	-146.35	4.0443	-0.0363	0	46500	-1.7128 E-11	4.16	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	BROADBAND LOAD -M-	2.4 mm male broadband load	2.92 mm	MALE	FIXED	OFF	OFF	0	46500	0.00E+00	0	50
12	BROADBAND LOAD -F-	2.4 mm female broadband load	2.92 mm	FEMALE	FIXED	OFF	OFF	0	46500	0.00E+00	0	50

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
19	THRU	2.4 mm/2.92 mm adapter pair	2.92 mm	FEMALE	2.92 mm	MALE	0	46500	1.00E-16	0	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
2.92 mm	2.92 mm male	MALE	COAX	0	46500	0
2.92 mm	2.92 mm female	FEMALE	COAX	0	46500	0

## 85056K 2.4 mm/2.92 mm with Broadband Load Calibration Kit (continued)

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	4	13						
S11B	9	18						
S11C	1	12						
S22A	4	13						
S22B	9	18						
S22C	1	12						
FWD MATCH	19							
FWD TRAN	19							
REV MATCH	19							
REV TRAN	19							
ISOLATION	1	12						

### TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU						
TRL REFLECT						
TRL LINE						
FWD MATCH						
REV MATCH						
ISOLATION	1	12				

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = THRU STANDARD

## 85058B Databased 1.85 mm Precision Calibration Kit

Std. No.	Label	Description	Connector	Sex	F min (MHz)	F max (MHz)
9	LOWBAND -F-	1.85 mm female lowband [LB LOAD]	1.85 mm	FEMALE	0	35500
4	OPEN LB -F-	1.85 mm female [OPEN]	1.85 mm	FEMALE	0	35500
3	SHORT 1 -F-	1.85 mm female [SHORT 1]	1.85 mm	FEMALE	0	73000
17	SHORT 2 -F-	1.85 mm female [SHORT 2]	1.85 mm	FEMALE	34900	73000
18	SHORT 3 -F-	1.85 mm female [SHORT 3]	1.85 mm	FEMALE	44999	73000
19	SHORT 4 -F-	1.85 mm female [SHORT 4]	1.85 mm	FEMALE	34900	55010
24	LOWBAND -M-	1.85 mm male lowband [LB LOAD]	1.85 mm	MALE	0	35500
2	OPEN LB -M-	1.85 mm male [OPEN]	1.85 mm	MALE	0	35500
1	SHORT 1 -M-	1.85 mm male [SHORT 1]	1.85 mm	MALE	0	73000
13	SHORT 2 -M-	1.85 mm male [SHORT 2]	1.85 mm	MALE	34900	73000
14	SHORT 3 -M-	1.85 mm male [SHORT 3]	1.85 mm	MALE	44999	73000
15	SHORT 4 -M-	1.85 mm male [SHORT 4]	1.85 mm	MALE	34900	55010

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
11	THRU	Insertable thru standard	1.85 mm	MALE	1.85 mm	FEMALE	0	73000	0.00E+00	0	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
1.85 mm	1.85 mm female	FEMALE	COAX	0	73000	0
1.85 mm	1.85 mm male	MALE	COAX	0	73000	0

## 85058B Databased 1.85 mm Precision Database Calibration Kit (continued)

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	4	18	19	2	14	15		
S11B	3	1						
S11C	9	17	24	13				
S22A	4	18	19	2	14	15		
S22B	3	1						
S22C	9	17	24	13				
FWD MATCH	11							
FWD TRAN	11							
REV MATCH	11							
REV TRAN	11							
ISOLATION								

### TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU						
TRL REFLECT						
TRL LINE						
FWD MATCH						
REV MATCH						
ISOLATION						

Calibration Reference Z0 = LINE Z0

Test Port Reference Plane = REFLECT STANDARD

## 85058BP Polynomial 1.85 mm (Reduced Accuracy) Calibration Kit

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz <sup>2</sup>	C3 F(e-45)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
4	OPEN LB -F-	1.85 mm female [OPEN]	1.85 mm	FEMALE	-7.7748	1332.4	-64.26	0.90991	0	35500	1.8015 E-11	3.2754	50
8	OPEN BB -F-	1.85 mm female [OPEN]	1.85 mm	FEMALE	-3.5342	425.24	-13.946	0.12741	0	999000	1.8001 E-11	3.2822	50
2	OPEN LB -M-	1.85 mm male [OPEN]	1.85 mm	MALE	2.127	73.815	-9.1135	0.13886	0	35500	1.8011 E-11	3.2762	50
6	OPEN BB -M-	1.85 mm male [OPEN]	1.85 mm	MALE	2.2757	0.60959	-3.9739	0.05204	0	999000	1.8011 E-11	3.2815	50

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz <sup>2</sup>	L3 H(e-42)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
3	SHORT 1 LB -F-	1.85 mm female [SHORT 1]	1.85 mm	FEMALE	1.8222	-934.86	64.091	-1.1161	0	35010	1.8012 E-11	3.9664	50
16	SHORT 1 HB -F-	1.85 mm female [SHORT 1]	1.85 mm	FEMALE	81.443	-5397.5	114.29	-0.77746	34900	73000	1.8012 E-11	4.0306	50
17	SHORT 2 -F-	1.85 mm female [SHORT 2]	1.85 mm	FEMALE	-168.11	10025	-195.63	1.2477	34900	73000	2.1015 E-11	3.9661	50
18	SHORT 3 -F-	1.85 mm female [SHORT 3]	1.85 mm	FEMALE	-85.542	5237.9	-105.29	0.68943	44999	73000	2.3750 E-11	3.9432	50
19	SHORT 4 -F-	1.85 mm female [SHORT 4]	1.85 mm	FEMALE	83.336	-4925.8	95.83	-0.61258	34900	55010	2.5351 E-11	3.8798	50
7	SHORT 1 BB -F-	1.85 mm female [SHORT 1]	1.85 mm	FEMALE	1.4957	-323.18	11.624	-0.10939	0	999000	1.8012 E-11	4.0812	50
1	SHORT 1 LB -M-	1.85 mm male [SHORT 1]	1.85 mm	MALE	-0.0845	163.6838	-7.0736	0.0811	0	35010	1.7998 E-11	4.109881	50
12	SHORT 1 HB -M-	1.85 mm male [SHORT 1]	1.85 mm	MALE	-26.329	1436.9	-24.863	0.1393	34900	73000	1.8012 E-11	4.0087	50
13	SHORT 2 -M-	1.85 mm male [SHORT 2]	1.85 mm	MALE	5.2837	-255.25	4.4398	-0.0248	34900	73000	2.1015 E-11	3.9424	50
14	SHORT 3 -M-	1.85 mm male [SHORT 3]	1.85 mm	MALE	-18.399	854.22	-12.502	0.0595	44999	73000	2.3750 E-11	3.9568	50
15	SHORT 4 -M-	1.85 mm male [SHORT 4]	1.85 mm	MALE	31.176	-1738.2	32.421	-0.1988	34900	55010	2.5351 E-11	3.8911	50
5	SHORT 1 BB -M-	1.85 mm male [SHORT 1]	1.85 mm	MALE	0.9658	8.9552	-0.7884	0.0079	0	999000	1.8012 E-11	4.0608	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
9	LOWBAND -F-	1.85 mm female lowband [LB LOAD]	1.85 mm	FEMALE	FIXED	OFF	OFF	0	35500	0.00E+00	0	50
10	BROADBAND -F-	1.85 mm female broadband [LB LOAD]	1.85 mm	FEMALE	FIXED	OFF	OFF	0	999000	0.00E+00	0	50
24	LOWBAND -M-	1.85 mm male lowband [LB LOAD]	1.85 mm	MALE	FIXED	OFF	OFF	0	35500	0.00E+00	0	50
22	BROADBAND -M-	1.85 mm male broadband [LB LOAD]	1.85 mm	MALE	FIXED	OFF	OFF	0	999000	0.00E+00	0	50

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
11	THRU	Insertable thru standard	1.85 mm	MALE	1.85 mm	FEMALE	0	73000	0.00E+00	0	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
1.85 mm	1.85 mm female	FEMALE	COAX	0	73000	0
1.85 mm	1.85 mm male	MALE	COAX	0	73000	0

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	4	18	19	8	2	14	15	6
S11B	3	16	7	1	12	5		
S11C	9	17	10	24	13	22		
S22A	4	18	19	8	2	14	15	6
S22B	3	16	7	1	12	5		
S22C	9	17	10	24	13	22		
FWD MATCH	11							
FWD TRAN	11							
REV MATCH	11							
REV TRAN	11							
ISOLATION	9	10	24	22				

### TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU						
TRL REFLECT						
TRL LINE						
FWD MATCH						
REV MATCH						
ISOLATION	9	10	24	22		

Calibration Reference Z0 = LINE Z0

Test Port Reference Plane = REFLECT STANDARD



## 85058E Databased 1.85 mm Economy Calibration Kit

Std. No.	Label	Description	Connector	Sex	F min (MHz)	F max (MHz)
9	BROADBAND -F-	1.85 mm female broadband load [TERM]	1.85 mm	FEMALE	0	73000
4	OPEN BB -F-	1.85 mm female [OPEN]	1.85 mm	FEMALE	0	73000
3	SHORT 1 -F-	1.85 mm female [SHORT 1]	1.85 mm	FEMALE	0	73000
24	BROADBAND -M-	1.85 mm male broadband load [TERM]	1.85 mm	MALE	0	73000
2	OPEN BB -M-	1.85 mm male [OPEN]	1.85 mm	MALE	0	73000
1	SHORT 1 -M-	1.85 mm male [SHORT 1]	1.85 mm	MALE	0	73000

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
11	THRU	Insertable thru standard	1.85 mm	MALE	1.85 mm	FEMALE	0	73000	0.00E+00	0	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
1.85 mm	1.85 mm female	FEMALE	COAX	0	73000	0
1.85 mm	1.85 mm male	MALE	COAX	0	73000	0

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	4	2						
S11B	3	1						
S11C	9	24						
S22A	4	2						
S22B	3	1						
S22C	9	24						
FWD MATCH	11							
FWD TRAN	11							
REV MATCH	11							
REV TRAN	11							
ISOLATION	9	24						

### TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU						
TRL REFLECT						
TRL LINE						
FWD MATCH						
REV MATCH						
ISOLATION	9	24				

Calibration Reference Z0 = LINE Z0

Test Port Reference Plane = REFLECT STANDARD

## 85058EP Polynomial 1.85 mm Economy (Reduced Accuracy) Calibration Kit

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz^2	C3 F(e-45)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
4	OPEN BB -F-	1.85 mm female [OPEN]	1.85 mm	FEMALE	-3.5342	425.24	-13.946	0.12741	0	999000	1.8001 E-11	3.2822	50
2	OPEN BB -M-	1.85 mm male [OPEN]	1.85 mm	MALE	2.2757	0.60959	-3.9739	0.05204	0	999000	1.8011 E-11	3.2815	50

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz^2	L3 H(e-42)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
3	SHORT 1 BB -F-	1.85 mm female [SHORT 1]	1.85 mm	FEMALE	1.7655	-68.032	1.2192	-0.0073	0	999000	1.8012 E-11	4.0812	50
1	SHORT 1 BB -M-	1.85 mm male [SHORT 1]	1.85 mm	MALE	0.9658	8.9552	-0.7884	0.0079	0	999000	1.8012 E-11	4.0608	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
9	BROADBAND -F-	1.85 mm female broadband load [TERM]	1.85 mm	FEMALE	FIXED	OFF	OFF	0	999000	0.00E+00	0	50
24	BROADBAND -M-	1.85 mm male broadband load [TERM]	1.85 mm	MALE	FIXED	OFF	OFF	0	999000	0.00E+00	0	50

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
11	THRU	Insertable thru standard	1.85 mm	MALE	1.85 mm	FEMALE	0	73000	0.00E+00	0	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
1.85 mm	1.85 mm female	FEMALE	COAX	0	73000	0
1.85 mm	1.85 mm male	MALE	COAX	0	73000	0

## 85058EP Polynomial 1.85 mm Economy (Reduced Accuracy) Calibration Kit (continued)

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	4	2						
S11B	3	1						
S11C	9	24						
S22A	4	2						
S22B	3	1						
S22C	9	24						
FWD MATCH	11							
FWD TRAN	11							
REV MATCH	11							
REV TRAN	11							
ISOLATION	9	24						

### TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU						
TRL REFLECT						
TRL LINE						
FWD MATCH						
REV MATCH						
ISOLATION	9	24				

Calibration Reference Z0 = LINE Z0

Test Port Reference Plane = THRU STANDARD

## 85059A Databased 1.00 mm Precision Calibration Kit

Std. No.	Label	Description	Connector	Sex	F min (MHz)	F max (MHz)
1	SHORT 1 -M-	1.00 mm Male [SHORT 1]	1.00 mm	MALE	49000	110000
2	SHORT 2 -M-	1.00 mm Male [SHORT 2]	1.00 mm	MALE	65000	110000
3	SHORT 3 -M-	1.00 mm Male [SHORT 3]	1.00 mm	MALE	0	110000
4	SHORT 4 -M-	1.00 mm Male [SHORT 4]	1.00 mm	MALE	49000	75100
5	OPEN -M-	1.00 mm Male [OPEN]	1.00 mm	MALE	0	50500
6	LB LOAD -M-	1.00 mm Male [LB LOAD]	1.00 mm	MALE	0	50500
7	SHORT 1 -F-	1.00 mm Female [SHORT 1]	1.00 mm	FEMALE	49000	110000
8	SHORT 2 -F-	1.00 mm Female [SHORT 2]	1.00 mm	FEMALE	65000	110000
9	SHORT 3 -F-	1.00 mm Female [SHORT 3]	1.00 mm	FEMALE	0	110000
10	SHORT 4 -F-	1.00 mm Female [SHORT 4]	1.00 mm	FEMALE	49000	79100
11	OPEN -F-	1.00 mm Female [OPEN]	1.00 mm	FEMALE	0	50500
12	LOWBAND -F-	1.00 mm Female [LB LOAD]	1.00 mm	FEMALE	0	50500

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
13	THRU	Insertable thru standard	1.00 mm	FEMALE	1.00 mm	MALE	0	120000	0.00E+00	0	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
1.00 mm	1.00 mm male	MALE	COAX	0	120000	0
1.00 mm	1.00 mm female	FEMALE	COAX	0	120000	0

## 85059A Databased 1.00 mm Precision Calibration Kit (continued)

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	1	6	7	12				
S11B	2	4	5	8	10	11		
S11C	3	9						
S22A	1	6	7	12				
S22B	2	4	5	8	10	11		
S22C	3	9						
FWD MATCH	13							
FWD TRAN	13							
REV MATCH	13							
REV TRAN	13							
ISOLATION	6	12						

### TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU						
TRL REFLECT						
TRL LINE						
FWD MATCH						
REV MATCH						
ISOLATION	6	12				

Calibration Reference Z0 = LINE Z0

Test Port Reference Plane = REFLECT STANDARD

## 85059AP Polynomial 1.00 mm (Reduced Accuracy) Calibration Kit

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz <sup>2</sup>	C3 F(e-45)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
4	OPEN LB -F-	1.00 mm female [OPEN]	1.00 mm	FEMALE	29.27	360.024	-8.3672	0.0758	0	50500	6.575 E-12	8	50
8	OPEN BB -F-	1.00 mm female [OPEN]	1.00 mm	FEMALE	28.4	543.356	-11.754	0.0793	0	999000	6.575 E-12	8	50
2	OPEN LB -M-	1.00 mm male [OPEN]	1.00 mm	MALE	31.579	162.211	-4.0954	0.037	0	50500	6.575 E-12	7.8	50
6	OPEN BB -M-	1.00 mm male [OPEN]	1.00 mm	MALE	31.043	274.897	-6.625	0.0539	0	999000	6.575 E-12	8	50

Std. No.	Label	Description	Connector	Sex	L0 H( E-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz <sup>2</sup>	L3 H(e-42)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
3	SHORT 3 LB -F-	1.00 mm female [SHORT 3]	1.00 mm	FEMALE	2.419	-21.1901	-0.8034	0.0095	0	50500	8.149 E-12	7.7	50
16	SHORT 1 HB -F-	1.00 mm female [SHORT 1]	1.00 mm	FEMALE	-0.9209	107.672	-1.553	0.0057	49900	999000	4.313 E-12	8	50
17	SHORT 2 -F-	1.00 mm female [SHORT 2]	1.00 mm	FEMALE	11.2987	-384.343	3.251	-0.009	65000	999000	6.064 E-12	8.55	50
18	SHORT 3 -F-	1.00 mm female [SHORT 3]	1.00 mm	FEMALE	8.2341	-305.298	3.7762	-0.015	49900	999000	8.149 E-12	8	50
19	SHORT 4 -F-	1.00 mm female [SHORT 4]	1.00 mm	FEMALE	45.099	-1988.66	27.99	-0.1258	49900	75100	9.984 E-12	8.23	50
7	SHORT 3 BB -F-	1.00 mm female [SHORT 3]	1.00 mm	FEMALE	4.3065	-156.379	1.9852	-0.0081	0	999000	8.149 E-12	7.9	50
1	SHORT 3 LB -M-	1.00 mm male [SHORT 3]	1.00 mm	MALE	3.2053	-171.65	3.3888	-0.0208	0	50500	8.149 E-12	7.74	50
12	SHORT 1 HB -M-	1.00 mm male [SHORT 1]	1.00 mm	MALE	4.4217	-174.59	2.2083	-0.0084	49900	999000	4.313 E-12	8	50
13	SHORT 2 -M-	1.00 mm male [SHORT 2]	1.00 mm	MALE	-14.4155	484.395	-5.0055	0.0164	65000	999000	6.064 E-12	8.51	50
14	SHORT 3 -M-	1.00 mm male [SHORT 3]	1.00 mm	MALE	1.14	24.8423	-0.9462	0.006	49900	999000	8.149 E-12	8	50
15	SHORT 4 -M-	1.00 mm male [SHORT 4]	1.00 mm	MALE	3.6474	-113.206	1.1075	-0.0027	49900	75100	9.984 E-12	8.2	50
5	SHORT 3 BB -M-	1.00 mm male [SHORT 3]	1.00 mm	MALE	0.2885	40.2472	-0.9816	0.0057	0	999000	8.149 E-12	7.93	50

## 85059AP Polynomial 1.00 mm (Reduced Accuracy) Calibration Kit (continued)

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
9	50 GHz LOAD -F-	1.00 mm female 50 GHz LOAD	1.00 mm	FEMALE	FIXED	OFF	OFF	0	50000	0.00E+00	0	50
10	BROADBAND -F-	1.00 mm female broadband LOAD	1.00 mm	FEMALE	FIXED	OFF	OFF	0	999000	0.00E+00	0	50
23	50 GHz MATCH -F-	1.00 mm female 50 GHz LOAD	1.00 mm	FEMALE	FIXED	OFF	OFF	0	55500	1.00E+05	0	50
24	50 GHz LOAD -M-	1.00 mm male 50 GHz LOAD	1.00 mm	MALE	FIXED	OFF	OFF	0	50500	0.00E+00	0	50
21	50 GHz MATCH -M-	1.00 mm male 50 GHz LOAD	1.00 mm	MALE	FIXED	OFF	OFF	0	55500	1.00E+05	0	50
22	BROADBAND -M-	1.00 mm male broadband LOAD	1.00 mm	MALE	FIXED	OFF	OFF	0	999000	0.00E+00	0	50

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
11	THRU	Insertable thru standard	1.00 mm	MALE	1.00 mm	FEMALE	0	999000	0.00E+00	0	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
1.00 mm	1.00 mm female	FEMALE	COAX	0	999000	0
1.00 mm	1.00 mm male	MALE	COAX	0	999000	0

## 85059AP Polynomial 1.00 mm (Reduced Accuracy) Calibration Kit (continued)

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	4	18	2	14				
S11B	3	16	1	12				
S11C	9	17	19	24	13	15		
S22A	4	18	2	14				
S22B	3	16	1	12				
S22C	9	17	19	24	13	15		
FWD MATCH	11							
FWD TRAN	11							
REV MATCH	11							
REV TRAN	11							
ISOLATION	10	22						

### TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU	11					
TRL REFLECT	7	5				
TRL LINE	23	21				
FWD MATCH	11					
REV MATCH	11					
ISOLATION	10	22				

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = THRU STANDARD



## 85059B 1.00mm Precision 120 GHz Databased Calibration Kit

Std. No.	Label	Description	Connector	Sex	F min (MHz)	F max (MHz)
1	SHORT 1 -M-	1.00 mm male short 1 (1.30mm)	1.00 mm	Male	0	130000
2	SHORT 2 -M-	1.00 mm male short 2 (2.45mm)	1.00 mm	Male	0	130000
3	SHORT 3 -M-	1.00 mm male short 3 (3.326mm)	1.00 mm	Male	0	130000
4	SHORT 4 -M-	1.00 mm male short 4 (4.039mm)	1.00 mm	Male	0	130000
5	OPEN -M-	1.00 mm male open	1.00 mm	Male	0	130000
6	LB LOAD -M-	1.00 mm male LB load 50 GHz	1.00 mm	Male	0	50100
7	SHORT 1 -F-	1.00 mm female short 1 (1.30mm)	1.00 mm	Female	0	130000
8	SHORT 2 -F-	1.00 mm female short 2 (2.45mm)	1.00 mm	Female	0	130000
9	SHORT 3 -F-	1.00 mm female short 3 (3.326mm)	1.00 mm	Female	0	130000
10	SHORT 4 -F-	1.00 mm female short 4 (4.039mm)	1.00 mm	Female	0	130000
11	OPEN -F-	1.00 mm female open	1.00 mm	Female	0	130000
12	LB LOAD -F-	1.00 mm female LB load 50GHz	1.00 mm	Female	0	50100

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
13	THRU	Insertable thru standard	1.00 mm	Female	1.00 mm	Male	0	130000	0.00E+00	0	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
1.00 mm	1.00 mm male	Male	Coax	0	130000	0
1.00 mm	1.00 mm female	Female	Coax	0	130000	0

## 85059B 1.00mm Precision 120 GHz Databased Calibration Kit (continued)

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
SA	2	8						
SB	5	11	1	7				
SC	6	12	3	4	9	10		
FORWARD_THRU	13							
FORWARD_MATCH	13							
REVERSE_THRU	13							
REVERSE_MATCH	13							
ISOLATION	6	12						

### TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL_REFLECT						
TRL_LINE						
TRL_MATCH						
ISOLATION	6	12				

Calibration Reference Z0 = LINE Z0

Test Port Reference Plane = THRU STANDARD

## N9910X-800 Type N (50)(m) 3-in-1 Calibration Kit

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz <sup>2</sup>	L3 H(e-42)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	SHORT -M-	Short -M-	Type N (50)	MALE	36.37	-166.2	-2434	292.1	0	6000	7.086 E-11	1.424	50

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz <sup>2</sup>	C3 F(e-45)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
2	OPEN -M-	Open -M-	Type N (50)	MALE	-2.686	-791.9	607.9	-65.48	0	6000	7.097 E-11	2.134	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
3	LOAD -M-	Broadband Load -M-	Type N (50)	MALE	FIXED	OFF	OFF	0	6000	0.00E+00	0.0	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
Type N (50)	Type N (50) male	MALE	COAX	0	10000	0

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
SA	1							
SB	2							
SC	3							

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = REFLECT STANDARD

## N9910X-801 Type N (50)(f) 3-in-1 Calibration Kit

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz <sup>2</sup>	L3 H(e-42)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	SHORT -F-	Short -F-	Type N (50)	FEMALE	-51.89	6561	4101	-675.7	0	6000	4.11E-11	2.395	50

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz <sup>2</sup>	C3 F(e-45)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
2	OPEN -F-	Open -F-	Type N (50)	FEMALE	17.89	-2511	-934.3	163.4	0	6000	4.08E-11	1.21	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
3	LOAD -F-	Broadband Load -F-	Type N (50)	FEMALE	FIXED	OFF	OFF	0	6000	0.00E+00	0.0	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
Type N (50)	Type N (50) female	FEMALE	COAX	0	10000	0

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
SA	1							
SB	2							
SC	3							

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = REFLECT STANDARD

## N9910X-802 7-16 (m) 3-in-1 Calibration Kit

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz^2	L3 H(e-42)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	SHORT -M-	Short -M-	7-16	MALE	2.359	1497	-2692	454.1	0	6000	6.636 E-11	0.4609	50

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz^2	C3 F(e-45)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
2	OPEN -M-	Open -M-	7-16	MALE	14.83	-25060	8570	-808.2	0	6000	6.587 E-11	0.4609	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
3	LOAD -M-	Broadband Load -M-	7-16	MALE	FIXED	OFF	OFF	0	6000	0.00E+00	0.0	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
7-16	7-16 male	MALE	COAX	0	20000	0

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
SA	1							
SB	2							
SC	3							

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = REFLECT STANDARD

## N9910X-803 7-16 (f) 3-in-1 Calibration Kit

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz^2	L3 H(e-42)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	SHORT -F-	Short -F-	7-16	FEMALE	-25.57	16390	-6690	834.2	0	6000	9.757E-11	0.4609	50

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz^2	C3 F(e-45)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
2	OPEN -F-	Open -F-	7-16	FEMALE	-9.373	-2142	1761	-199.3	0	6000	9.72E-11	0.4609	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
3	LOAD -F-	Broadband Load -F-	7-16	FEMALE	FIXED	OFF	OFF	0	6000	0.00E+00	0.0	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
7-16	7-16 female	FEMALE	COAX	0	20000	0

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
SA	1							
SB	2							
SC	3							

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = REFLECT STANDARD

## 85514A Type N (50)(m) 4-in-1 Calibration Kit

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz^2	L3 H(e-42)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	SHORT -M-	Type N (50) male short	Type N	MALE	20.224	-1479.2	-591.4	63.325	0	10000	5.3385 E-11	0.9235	50

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz^2	C3 F(e-45)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
2	OPEN -M-	Type N (50) male open	Type N	MALE	-8.9274	-105.82	585.23	-53.079	0	10000	5.3882 E-11	0.8392	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
3	Broadband Load -M-	Type N (50) male broadband load	Type N	MALE	FIXED	OFF	OFF	0	10000	0.00E+00	0.0	50

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
4	Thru M-M	Define thru M-M	Type N	MALE	Type N	MALE	0	10000	2.42E-10	0.84	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
Type N	Type N male	MALE	COAX	0	10000	0

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
SA	2							
SB	1							
SC	3							
FORWARD_THRU	4							
FORWARD_MATCH	4							
REVERSE_THRU	4							
REVERSE_MATCH	4							
ISOLATION	3							

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = THRU STANDARD

## 85515A Type N (50)(f) 4-in-1 Calibration Kit

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz^2	L3 H(e-42)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	SHORT -F-	Type N (50) female short	Type N	FEMALE	25.366	-8070.9	932.91	-33.888	0	10000	5.3385 E-11	0.9235	50

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz^2	C3 F(e-45)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
2	OPEN -F-	Type N (50) female open	Type N	FEMALE	-7.7250	-2062.8	1317.5	-112.18	0	10000	5.3531 E-11	0.8392	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
3	Broadband Load -F-	Type N (50) female broadband load	Type N	FEMALE	FIXED	OFF	OFF	0	10000	0.00E+00	0.0	50

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
4	Thru F-F	Define thru F-F	Type N	FEMALE	Type N	FEMALE	0	10000	2.42E-10	0.84	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
Type N	Type N female	FEMALE	COAX	0	10000	0

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
SA	2							
SB	1							
SC	3							
FORWARD_THRU	4							
FORWARD_MATCH	4							
REVERSE_THRU	4							
REVERSE_MATCH	4							
ISOLATION	3							

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = THRU STANDARD



## 85518A Type N (50)(m) 4-in-1 Calibration Kit

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz^2	L3 H(e-42)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	SHORT -M-	Type N (50) male short	Type N	MALE	41.01	-13740	1386	-41.56	0	18000	8.6021 E-11	1.08	50

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz^2	C3 F(e-45)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
2	OPEN -M-	Type N (50) male open	Type N	MALE	8.471	-2513.0	171.3	-1.47	0	18000	5.595 E-11	1.08	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
3	Broadband Load -M-	Type N (50) male broadband load	Type N	MALE	FIXED	OFF	OFF	0	18000	0.00E+00	0.0	50

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
4	Thru M-M	Define thru M-M	Type N	MALE	Type N	MALE	0	18000	2.45383E-10	1.08	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
Type N	Type N male	MALE	COAX	0	18000	0

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
SA	2							
SB	1							
SC	3							
FORWARD_THRU	4							
FORWARD_MATCH	4							
REVERSE_THRU	4							
REVERSE_MATCH	4							
ISOLATION	3							

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = THRU STANDARD

## 85519A Type N (50)(f) 4-in-1 Calibration Kit

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz^2	L3 H(e-42)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	SHORT -F-	Type N (50) female short	Type N	FEMALE	16.9	-5881	614.4	-18.52	0	18000	8.5954E-11	0.89	50

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz^2	C3 F(e-45)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
2	OPEN -F-	Type N (50) female open	Type N	FEMALE	0.8918	-1200	85.41	0.13	0	18000	8.5954E-11	0.89	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
3	Broadband Load -F-	Type N (50) female broadband load	Type N	FEMALE	FIXED	OFF	OFF	0	18000	0.00E+00	0.0	50

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
4	Thru F-F	Define thru F-F	Type N	FEMALE	Type N	FEMALE	0	18000	2.44949E-10	0.89	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
Type N	Type N female	FEMALE	COAX	0	18000	0

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
SA	2							
SB	1							
SC	3							
FORWARD_THRU	4							
FORWARD_MATCH	4							
REVERSE_THRU	4							
REVERSE_MATCH	4							
ISOLATION	3							

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = THRU STANDARD

## 85520A 3.5 mm (m) 4-in-1 Calibration Kit

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz^2	L3 H(e-42)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	SHORT -M-	3.5 mm male short	3.5 mm	MALE	4.645	-331	10.8	-0.12	0	26500	3.0508 E-11	1.8	50

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz^2	C3 F(e-45)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
2	OPEN -M-	3.5 mm male open	3.5 mm	MALE	-0.11	6	-4.39	0.179	0	26500	3.0765 E-11	1.8	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
3	Broadband Load -M-	3.5 mm male broadband load	3.5 mm	MALE	FIXED	OFF	OFF	0	26500	0.00E+00	0.0	50

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
4	Thru M-M	Define thru M-M	3.5 mm	MALE	3.5 mm	MALE	0	26500	1.15888E-10	1.8	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
3.5 mm	3.5 mm male	MALE	COAX	0	26500	0

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
SA	2							
SB	1							
SC	3							
FORWARD_THRU	4							
FORWARD_MATCH	4							
REVERSE_THRU	4							
REVERSE_MATCH	4							
ISOLATION	3							

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = THRU STANDARD

## 85521A 3.5 mm (f) 4-in-1 Calibration Kit

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz^2	L3 H(e-42)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	SHORT -F-	3.5 mm female short	3.5 mm	FEMALE	-8.424	2912	-217	4.51	0	26500	3.0581E-11	1.8	50

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz^2	C3 F(e-45)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
2	OPEN -F-	3.5 mm female open	3.5 mm	FEMALE	3.695	-625.6	-2.2	0.104	0	26500	3.1823E-11	1.8	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
3	Broadband Load -F-	3.5 mm female broadband load	3.5 mm	FEMALE	FIXED	OFF	OFF	0	26500	0.00E+00	0.0	50

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
4	Thru F-F	Define thru F-F	3.5 mm	FEMALE	3.5 mm	FEMALE	0	26500	1.15881E-10	1.8	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
3.5 mm	3.5 mm female	FEMALE	COAX	0	26500	0

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
SA	2							
SB	1							
SC	3							
FORWARD_THRU	4							
FORWARD_MATCH	4							
REVERSE_THRU	4							
REVERSE_MATCH	4							
ISOLATION	3							

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = THRU STANDARD

## 85561A 2.92 mm (f) 4-in-1 Calibration Kit

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz^2	C3 F(e-45)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	OPEN -F-	2.92 mm female open	2.92 mm	FEMALE	3.7458	-609.26	21.172	-0.14373	0	44000	3.1522 E-11	2.309	50

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz^2	L3 H(e-42)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
2	SHORT -F-	2.92 mm female short	2.92 mm	FEMALE	1.5918	-596.22	27.315	-0.42643	0	44000	3.1288 E-11	2.046	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
5	LOAD -F-	2.92 mm female load	2.92 mm	FEMALE	FIXED	OFF	OFF	0	44000	0.00E+00	0.0	50

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
7	THRU	Insertable thru standard	2.92 mm	FEMALE	2.92 mm	FEMALE	0	44000	1.16114E-10	2.5	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
2.92 mm	2.92 mm female	FEMALE	COAX	0	44000	0

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
SA	1							
SB	2							
SC	5							
FORWARD_THRU	7							
FORWARD_MATCH	7							
REVERSE_THRU	7							
REVERSE_MATCH	7							
ISOLATION	5							
PARTIALLY_KNOWN_THRU	7							

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = THRU STANDARD

## 85562A 2.92 mm (m) 4-in-1 Calibration Kit

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz^2	C3 F(e-45)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
3	OPEN -M-	2.92 mm male open	2.92 mm	MALE	2.1868	310.6	-18.4723	0.37014	0	44000	3.1288 E-11	2.309	50

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz^2	L3 H(e-42)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
4	SHORT -M-	2.92 mm male short	2.92 mm	MALE	2.6109	-1018.47	51.738	-0.77377	0	44000	3.1288 E-11	2.046	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
6	LOAD -M-	2.92 mm male load	2.92 mm	MALE	FIXED	OFF	OFF	0	44000	0.00E+00	0.0	50

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
7	THRU	Insertable thru standard	2.92 mm	MALE	2.92 mm	MALE	0	44000	1.161E-10	2.5	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
2.92 mm	2.92 mm male	MALE	COAX	0	44000	0

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
SA	3							
SB	4							
SC	6							
FORWARD_THRU	7							
FORWARD_MATCH	7							
REVERSE_THRU	7							
REVERSE_MATCH	7							
ISOLATION	6							
PARTIALLY_KNOWN_THRU	7							

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = THRU STANDARD

## 85563A 2.4 mm (f) 4-in-1 Calibration Kit

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz <sup>2</sup>	C3 F(e-45)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
6	OPEN -F-	2.4 mm female open	2.4 mm	FEMALE	29.72	165.78	-3.5386	0.071	0	50000	2.0837 E-11	3.23	50

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz <sup>2</sup>	L3 H(e-42)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
7	SHORT -F-	2.4 mm female short	2.4 mm	FEMALE	2.1636	-146.35	4.0443	-0.0363	0	50000	2.2548 E-11	3.554	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
5	BROADBAND LOAD -F-	2.4 mm female broadband load	2.4 mm	FEMALE	FIXED	OFF	OFF	0	50000	0.00E+00	0.0	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
2.4 mm	2.4 mm female	FEMALE	COAX	0	50000	0

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
SA	6							
SB	7							
SC	5							
FORWARD_THRU								
FORWARD_MATCH								
REVERSE_THRU								
REVERSE_MATCH								
ISOLATION	5							

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = THRU STANDARD

## 85564A 2.4 mm (m) 4-in-1 Calibration Kit

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz <sup>2</sup>	C3 F(e-45)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
2	OPEN -M-	2.4 mm male open	2.4 mm	MALE	29.722	165.78	-3.5386	0.071	0	50000	2.0837 E-11	3.23	50

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz <sup>2</sup>	L3 H(e-42)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	SHORT -M-	2.4 mm male short	2.4 mm	MALE	2.1636	-146.35	4.0443	-0.0363	0	44000	2.2548 E-11	3.554	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
3	LOAD -M-	2.4 mm male load	2.4 mm	MALE	FIXED	OFF	OFF	0	50000	0.00E+00	0.0	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
2.4 mm	2.4 mm male	MALE	COAX	0	50000	0

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
SA	2							
SB	1							
SC	3							
FORWARD_THRU								
FORWARD_MATCH								
REVERSE_THRU								
REVERSE_MATCH								
ISOLATION	3							

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = THRU STANDARD



## Maury 8650S TNC Broadband Calibration Kit

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz <sup>2</sup>	L3 H(e-42)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	SHORT -F-	8615A Female Short	TNC	FEMALE	0	0	0	0	0	18000	6.0208 E-11	0.7	50
2	SHORT -M-	8615B Male Short	TNC	MALE	0	0	0	0	0	18000	8.4292 E-11	0.7	50

Std. No.	Label	Description	Connector	Sex	C0 F(e-15)	C1 F(e-27)/Hz	C2 F(e-36)/Hz <sup>2</sup>	C3 F(e-45)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
3	OPEN -F-	8609B Female Open	TNC	FEMALE	79	0	40	0	0	18000	5.6086 E-11	0.7	50
4	OPEN -M-	8610B Male Open	TNC	MALE	79	0	40	0	0	18000	8.0169 E-11	0.7	50

Std. No.	Label	Description	Connector	Sex	Fixed/Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
5	BROADBAND LOAD -F-	Female Broadband Load	TNC	FEMALE	FIXED	OFF	OFF	0	18000	0.00E+00	0	50
6	BROADBAND LOAD -M-	Male Broadband Load	TNC	MALE	FIXED	OFF	OFF	0	18000	0.00E+00	0	50
7	LOWBAND LOAD -F-	Female Broadband Load	TNC	FEMALE	FIXED	OFF	OFF	0	2001	0.00E+00	0	50
8	LOWBAND LOAD -M-	Male Broadband Load	TNC	MALE	FIXED	OFF	OFF	0	2001	0.00E+00	0	50

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
9	THRU	Insertable thru standard	TNC	FEMALE	TNC	MALE	0	999000	0.00E+00	0	50

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
TNC	TNC male	MALE	COAX	0	18000	0
TNC	TNC female	FEMALE	COAX	0	18000	0

## Maury 8650S TNC Broadband Calibration Kit (continued)

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
SA	3	4						
SB	1	2						
SC	5	6	7	8				
FORWARD_MATCH	9							
FORWARD_THRU	9							
REVERSE_MATCH	9							
REVERSE_THRU	9							
ISOLATION	5	6	7	8				

Calibration Reference Z0 = SYSTEM Z0

Test Port Reference Plane = THRU STANDARD

## X11644A X-Band Waveguide SOLT/TRL Calibration Kit

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz <sup>2</sup>	L3 H(e-42)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
4	Short	X-band short	X-band waveguide	NONE	0	0	0	0	6555	13111	0.00E+00	0	1
5	Short Offset	X-band 1/4 offset short	X-band waveguide	NONE	0	0	0	0	6555	13111	3.26332E-11	0.798	1

Std. No.	Label	Description	Connector	Sex	Fixed/ Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	Offset Load	X-band offset load	X-band waveguide	NONE	FIXED	OFF	ON	6555	13111	0.00E+00	0	1
2	Fixed Load	X-band fixed load	X-band waveguide	NONE	FIXED	OFF	OFF	6555	13111	0.00E+00	0	1
3	Sliding Load	X-band sliding load	X-band waveguide	NONE	SLIDING	OFF	OFF	6555	13111	0.00E+00	0	1

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
6	Thru	X-band Thru	X-band waveguide	NONE	X-band waveguide	NONE	6555	13111	0.00E+00	0	1
7	1/4 Line	X-band 1/4 wavelength line	X-band waveguide	NONE	X-band waveguide	NONE	6555	13111	3.26332E-11	0.798	1

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
X-band waveguide	X-band waveguide	NONE	WAVEGUIDE	6555	13111	6555

# X11644A X-Band Waveguide SOLT/TRL Calibration Kit

## SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	4							
S11B	5							
S11C	1	2	3					
S22A	4							
S22B	5							
S22C	1	2	3					
FWD MATCH	6	7						
FWD TRAN	6	7						
REV MATCH	6	7						
REV TRAN	6	7						
ISOLATION	1	2	3					

## TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU	6					
TRL REFLECT	4					
TRL LINE	7					
FWD MATCH	3					
REV MATCH	3					
ISOLATION	1	2	3			

Calibration Reference Z0 = LINE Z0

Test Port Reference Plane = THRU STANDARD

## P11644A P-Band Waveguide SOLT/TRL Calibration Kit

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz^2	L3 H(e-42)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
4	Short	P-band short	P-band waveguide	NONE	0	0	0	0	9485	18970	0.00E+00	0	1
5	Offset Short	P-band 1/4 offset short	P-band waveguide	NONE	0	0	0	0	9485	18970	2.16887E-11	1.235	1

Std. No.	Label	Description	Connector	Sex	Fixed/ Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	Offset Load	P-band offset load	P-band waveguide	NONE	FIXED	OFF	ON	9485	18970	0.00E+00	0	1
2	Fixed Load	P-band fixed load	P-band waveguide	NONE	FIXED	OFF	OFF	9485	18970	0.00E+00	0	1
3	Sliding Load	P-band sliding load	P-band waveguide	NONE	SLIDING	OFF	OFF	9485	18970	0.00E+00	0	1

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
6	Thru	P-band Thru	P-band waveguide	NONE	P-band waveguide	NONE	9485	18970	0.00E+00	0	1
7	1/4 Line	P-band 1/4 wavelength line	P-band waveguide	NONE	P-band waveguide	NONE	9485	18970	2.16887E-11	1.235	1

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
P-band waveguide	P-band waveguide	NONE	WAVEGUIDE	9485	18970	9485

# P11644A P-Band Waveguide SOLT/TRL Calibration Kit

## SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	4							
S11B	5							
S11C	1	2	3					
S22A	4							
S22B	5							
S22C	1	2	3					
FWD MATCH	6	7						
FWD TRAN	6	7						
REV MATCH	6	7						
REV TRAN	6	7						
ISOLATION	1	2	3					

## TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU	6					
TRL REFLECT	4					
TRL LINE	7					
FWD MATCH	3					
REV MATCH	3					
ISOLATION	1	2	3			

Calibration Reference Z0 = LINE Z0

Test Port Reference Plane = THRU STANDARD

## K11644A K-Band Waveguide SOLT/TRL Calibration Kit

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz <sup>2</sup>	L3 H(e-42)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
4	Short	K-band short	K-band waveguide	NONE	0	0	0	0	14047	28094	0.00E+00	0	1
5	Offset Short	K-band 1/4 offset short	K-band waveguide	NONE	0	0	0	0	14047	28094	1.502E-11	2.75	1

Std. No.	Label	Description	Connector	Sex	Fixed/ Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	Offset Load	K-band offset load	K-band waveguide	NONE	FIXED	OFF	ON	14047	28094	0.00E+00	0	1
2	Fixed Load	K-band fixed load	K-band waveguide	NONE	FIXED	OFF	OFF	14047	28094	0.00E+00	0	1
3	Sliding Load	K-band sliding load	K-band waveguide	NONE	SLIDING	OFF	OFF	14047	28094	0.00E+00	0	1

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
6	Thru	K-band Thru	K-band waveguide	NONE	K-band waveguide	NONE	14047	28094	0.00E+00	0	1
7	1/4 Line	K-band 1/4 wavelength line	K-band waveguide	NONE	K-band waveguide	NONE	14047	28094	1.502E-11	2.75	1

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
K-band waveguide	K-band waveguide	NONE	WAVEGUIDE	14047	28094	14047

# K11644A K-Band Waveguide SOLT/TRL Calibration Kit

## SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	4							
S11B	5							
S11C	1	2	3					
S22A	4							
S22B	5							
S22C	1	2	3					
FWD MATCH	6	7						
FWD TRAN	6	7						
REV MATCH	6	7						
REV TRAN	6	7						
ISOLATION	1	2	3					

## TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU	6					
TRL REFLECT	4					
TRL LINE	7					
FWD MATCH	3					
REV MATCH	3					
ISOLATION	1	2	3			

Calibration Reference Z0 = LINE Z0

Test Port Reference Plane = THRU STANDARD



## R11644A R-Band Waveguide SOLT/TRL Calibration Kit

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz <sup>2</sup>	L3 H(e-42)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
4	Short	R-band short	R-band waveguide	NONE	0	0	0	0	21071	42142	0.00E+00	0	1
5	Offset Short	R-band 1/4 offset short	R-band waveguide	NONE	0	0	0	0	21071	42142	1.00702E-11	9	1

Std. No.	Label	Description	Connector	Sex	Fixed/ Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	Offset Load	R-band offset load	R-band waveguide	NONE	FIXED	OFF	ON	21071	42142	0.00E+00	0	1
2	Fixed Load	R-band fixed load	R-band waveguide	NONE	FIXED	OFF	OFF	21071	42142	0.00E+00	0	1
3	Sliding Load	R-band sliding load	R-band waveguide	NONE	FIXED	OFF	OFF	21071	42142	0.00E+00	0	1

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
6	Thru	R-band Thru	R-band waveguide	NONE	R-band waveguide	NONE	21071	42142	0.00E+00	0	1
7	1/4 Line	R-band 1/4 wavelength line	R-band waveguide	NONE	R-band waveguide	NONE	21071	42142	1.00702E-11	9	1

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
R-band waveguide	R-band waveguide	NONE	WAVEGUIDE	21071	42142	21071

# R11644A R-Band Waveguide SOLT/TRL Calibration Kit

## SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	4							
S11B	5							
S11C	1	2	3					
S22A	4							
S22B	5							
S22C	1	2	3					
FWD MATCH	6	7						
FWD TRAN	6	7						
REV MATCH	6	7						
REV TRAN	6	7						
ISOLATION	1	2	3					

## TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU	6					
TRL REFLECT	4					
TRL LINE	7					
FWD MATCH	3					
REV MATCH	3					
ISOLATION	1	2	3			

Calibration Reference Z0 = LINE Z0

Test Port Reference Plane = THRU STANDARD

## Q11644A Q-Band Waveguide SOLT/TRL Calibration Kit

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz^2	L3 H(e-42)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
4	Short	Q-band short	Q-band waveguide	NONE	0	0	0	0	26338	52676	0.00E+00	0	1
5	Offset Short	Q-band 1/4 offset short	Q-band waveguide	NONE	0	0	0	0	26338	52676	8.0815E-12	12.77	1

Std. No.	Label	Description	Connector	Sex	Fixed/ Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	Offset Load	Q-band offset load	Q-band waveguide	NONE	FIXED	OFF	ON	26338	52676	0.00E+00	0	1
2	Fixed Load	Q-band fixed load	Q-band waveguide	NONE	SLIDING	OFF	OFF	26338	52676	0.00E+00	0	1
3	Sliding Load	Q-band sliding load	Q-band waveguide	NONE	FIXED	OFF	OFF	26338	52676	0.00E+00	0	1

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
6	Thru	Q-band Thru	Q-band waveguide	NONE	Q-band waveguide	NONE	26338	52676	0.00E+00	0	1
7	1/4 Line	Q-band 1/4 wavelength line	Q-band waveguide	NONE	Q-band waveguide	NONE	26338	52676	0.00E+00	0	1

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
Q-band waveguide	Q-band waveguide	NONE	WAVEGUIDE	26338	52676	26338

## Q11644A Q-Band Waveguide SOLT/TRL Calibration Kit

### SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	4							
S11B	5							
S11C	1	2	3					
S22A	4							
S22B	5							
S22C	1	2	3					
FWD MATCH	6	7						
FWD TRAN	6	7						
REV MATCH	6	7						
REV TRAN	6	7						
ISOLATION	1	2	3					

### TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU	6					
TRL REFLECT	4					
TRL LINE	7					
FWD MATCH	3					
REV MATCH	3					
ISOLATION	1	2	3			

Calibration Reference Z0 = LINE Z0

Test Port Reference Plane = THRU STANDARD

## U11644A U-Band Waveguide SOLT/TRL Calibration Kit

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz^2	L3 H(e-42)/Hz^3	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
4	Short	U-band short	U-band waveguide	NONE	0	0	0	0	31386	62772	0.00E+00	0	1
5	Offset Short	U-band 1/4 offset short	U-band waveguide	NONE	0	0	0	0	31386	62772	6.6434E-12	16.65	1

Std. No.	Label	Description	Connector	Sex	Fixed/ Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	Offset Load	U-band offset load	U-band waveguide	NONE	FIXED	OFF	ON	31386	62772	0.00E+00	0	1
2	Fixed Load	U-band fixed load	U-band waveguide	NONE	FIXED	OFF	OFF	31386	62772	0.00E+00	0	1
3	Sliding Load	U-band sliding load	U-band waveguide	NONE	SLIDING	OFF	OFF	31386	62772	0.00E+00	0	1

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
6	Thru	U-band Thru	U-band waveguide	NONE	U-band waveguide	NONE	31386	62772	0.00E+00	0	1
7	1/4 Line	U-band 1/4 wavelength line	U-band waveguide	NONE	U-band waveguide	NONE	31386	62772	6.6434E-12	16.65	1

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
U-band waveguide	U-band waveguide	NONE	WAVEGUIDE	31386	62772	31386

# U11644A U-Band Waveguide SOLT/TRL Calibration Kit

## SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	4							
S11B	5							
S11C	1	2	3					
S22A	4							
S22B	5							
S22C	1	2	3					
FWD MATCH	6	7						
FWD TRAN	6	7						
REV MATCH	6	7						
REV TRAN	6	7						
ISOLATION	1	2	3					

## TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU	6					
TRL REFLECT	4					
TRL LINE	7					
FWD MATCH	3					
REV MATCH	3					
ISOLATION	1	2	3			

Calibration Reference Z0 = LINE Z0

Test Port Reference Plane = THRU STANDARD

## V11644A V-Band Waveguide SOLT/TRL Calibration Kit

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz <sup>2</sup>	L3 H(e-42)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
4	Short	V-band short	V-band waveguide	NONE	0	0	0	0	39873	79745	0.00E+00	0	1
5	Offset Short	V-band 1/4 offset short	V-band waveguide	NONE	0	0	0	0	39873	79745	5.3755E-12	24.226	1

Std. No.	Label	Description	Connector	Sex	Fixed/ Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	Offset Load	V-band offset load	V-band waveguide	NONE	FIXED	OFF	ON	39873	79745	0.00E+00	0	1
2	Fixed Load	V-band fixed load	V-band waveguide	NONE	FIXED	OFF	OFF	39873	79745	0.00E+00	0	1
3	Sliding Load	V-band sliding load	V-band waveguide	NONE	FIXED	OFF	OFF	39873	79745	0.00E+00	0	1

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
6	Thru	V-band Thru	V-band waveguide	NONE	V-band waveguide	NONE	39873	79745	0.00E+00	0	1
7	1/4 Line	V-band 1/4 wavelength line	V-band waveguide	NONE	V-band waveguide	NONE	39873	79745	5.3755E-12	24.226	1

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
V-band waveguide	V-band waveguide	NONE	WAVEGUIDE	39873	79745	39873

# V11644A V-Band Waveguide SOLT/TRL Calibration Kit

## SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	4							
S11B	5							
S11C	1	2	3					
S22A	4							
S22B	5							
S22C	1	2	3					
FWD MATCH	6	7						
FWD TRAN	6	7						
REV MATCH	6	7						
REV TRAN	6	7						
ISOLATION	1	2	3					

## TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU	6					
TRL REFLECT	4					
TRL LINE	7					
FWD MATCH	3					
REV MATCH	3					
ISOLATION	1	2	3			

Calibration Reference Z0 = LINE Z0

Test Port Reference Plane = THRU STANDARD



## W11644A W-Band Waveguide SOLT/TRL Calibration Kit

Std. No.	Label	Description	Connector	Sex	L0 H(e-12)	L1 H(e-24)/Hz	L2 H(e-33)/Hz <sup>2</sup>	L3 H(e-42)/Hz <sup>3</sup>	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
4	Short	W-band short	W-band waveguide	NONE	0	0	0	0	59024	118050	0.00E+00	0	1
5	Offset Short	W-band 1/4 offset short	W-band waveguide	NONE	0	0	0	0	59024	118050	3.6203E-12	64.85	1

Std. No.	Label	Description	Connector	Sex	Fixed/ Sliding	Arbitrary Impedance	Offset Load	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
1	Offset Load	W-band offset load	W-band waveguide	NONE	FIXED	OFF	ON	59024	118050	0.00E+00	0	1
2	Fixed Load	W-band fixed load	W-band waveguide	NONE	FIXED	OFF	OFF	59024	118050	0.00E+00	0	1
3	Sliding Load	W-band sliding load	W-band waveguide	NONE	FIXED	OFF	OFF	59024	118050	0.00E+00	0	1

Std. No.	Label	Description	Connector Port1	Sex Port1	Connector Port2	Sex Port2	F min (MHz)	F max (MHz)	Delay (Sec)	Loss (Gohm/Sec)	Z0 (Ohm)
6	Thru	W-band Thru	V-band waveguide	NONE	W-band waveguide	NONE	59024	118050	0.00E+00	0	1
7	1/4 Line	W-band 1/4 wavelength line	V-band waveguide	NONE	W-band waveguide	NONE	59024	118050	3.6203E-12	64.85	1

Connector	Description	Sex	Media	Min Freq (MHz)	Max Freq (MHz)	Cutoff Freq (MHz)
W-band waveguide	W-band waveguide	NONE	WAVEGUIDE	59024	118050	59024

# W11644A W-Band Waveguide SOLT/TRL Calibration Kit

## SOLT Class Assignments

Class Label	A	B	C	D	E	F	G	H
S11A	4							
S11B	5							
S11C	1	2	3					
S22A	4							
S22B	5							
S22C	1	2	3					
FWD MATCH	6	7						
FWD TRAN	6	7						
REV MATCH	6	7						
REV TRAN	6	7						
ISOLATION	1	2	3					

## TRL Class Assignments

Class Label	A	B	C	D	E	F
TRL THRU	6					
TRL REFLECT	4					
TRL LINE	7					
FWD MATCH	3					
REV MATCH	3					
ISOLATION	1	2	3			

Calibration Reference Z0 = LINE Z0

Test Port Reference Plane = THRU STANDARD