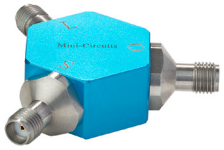
PRECISION

SMA Calibration Standard SOL-63-SF+

50Ω DC to 6 GHz

THE BIG DEAL

- Precision SMA calibration standard up to 6 GHz
- Works out of the box with Mini-Circuits' eVNA-63+
- SMA-Female Short / Open / Load standard
- Performs a one-port calibration on a VNA
- Cardboard storage case



Generic photo used for illustration purposes only

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Model Number	SOL-63-SF+
Case Style	VR3264
Connector	SMA-Female

APPLICATIONS

- VNA Calibration

PRODUCT OVERVIEW

Mini-Circuits' SOL-63-SF+ is an SMA-Female short, open, & load calibration standard intended for VNA measurements of any SMA-Female DUT (device under test). The standard is supplied in a cardboard storage and display case.

SOL-63-SF+ is offered in Mini-Circuits' calibration kit, KSOLT-63-S+, which is supported by Mini-Circuits eVNA-63+ vector network analyzer right out of the box, with all calibration definitions pre-loaded within the eVNA Studio software. The standards can also be used as a cost-effective, high-performance alternative to calibration kits from a wide range of VNA suppliers.

KEY FEATURES

Feature	Advantages
Cost effective	Cost effective when comparing against competitors with similar specifications
1 Port Calibration	Single standard is all you need for one-port calibration of SMA-Female devices
2 Port Calibration	Combine with a thru to make fully calibrated 2-port or greater measurements with a VNA
Excellent return loss, 42 dB typ at load port	Precision calibration standards with high return loss minimize the measurement errors within a VNA system

REV OR
ECO-011424
SOL-63-SF+
MCL NY
220113

SMA Calibration Standard SOL-63-SF+

ELECTRICAL SPECIFICATIONS

Standard	Parameter	Min	Typ	Max	Units
	Frequency Range	DC		6	GHz
	Impedance		50		Ω
SHORT, OPEN	Phase Error[1]		1	2.5	°
LOAD	Return Loss	36	42		dB

1. Phase error is the phase deviation from the calkit model definition

MAXIMUM RATINGS[2]

Parameter	Ratings
Operating Temperature[3]	20°C to 26°C
Storage Temperature	-20°C to 75°C
Supply Voltage	0.25 W

2. Permanent damage may occur if any of these limits are exceeded.
3.Operating temperature specified for optimal performance

CALKIT MODEL DEFINITION

P/N	Standard Label	Parameter	Value	Units	Additional Format
SOL-63-SF+	SHORT -F-	Offset Delay	16.7	ps	5.01 mm
		Offset Loss	10	GΩ/s	0.029 dB/√GHz
		Z0	50	Ω	50 Ω
		L0	8.000	(1E-12) H	8 pH
		L1	-995.000	(1E-24) H/Hz	-0.995 pH/GHz
		L2	33.000	(1E-33) H/Hz^2	0.033 pH/GHz^2
		L3	-0.290	(1E-42) H/Hz^3	-0.00029 pH/GHz^3
	OPEN -F-	Offset Delay	16.7	ps	5.01 mm
		Offset Loss	3	GΩ/s	0.009 dB/√GHz
		Z0	50	Ω	50 Ω
		C0	5.000	(1e-15) F	5 fF
		C1	0.000	(1e-27) F/Hz	0 fF/GHz
		C2	1.500	(1e-36) F/Hz^2	0.0015 fF/GHz^2
		C3	0.100	(1e-45) F/Hz^3	0.0001 fF/GHz^3
	LOAD	Offset Delay	0	ps	0 mm
		Offset Loss	0	GΩ/s	0 dB/√GHz
		Z0	50	Ω	50 Ω

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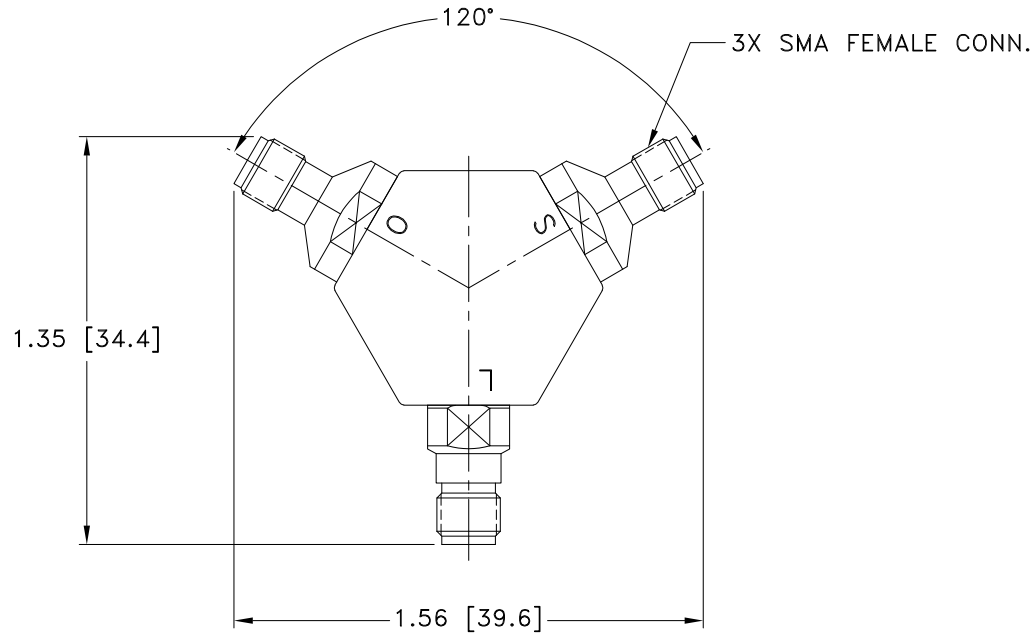
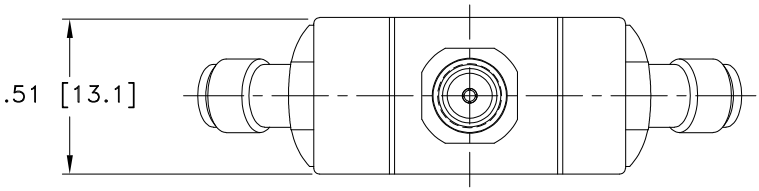
OUTLINE DRAWING





Weight: 32.0 grams

Dimensions are in inches [mm]. Tolerances: 2 Pl.±.03; 3 Pl. ±.015

Notes:

1. Case material: Aluminum
2. Case Finish: Blue Anodize