

SMP-L™ Interconnect Series

CARLISLE
INTERCONNECT TECHNOLOGIES



SMP-L Connectors with Secure-Lok™ feature

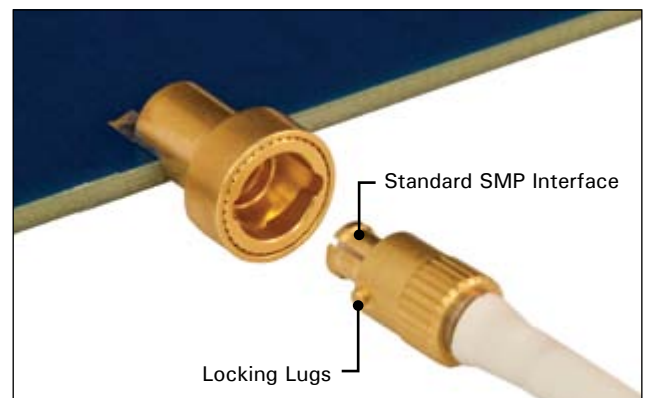
INTRODUCTION

The introduction of push-on blindmateable connectors, such as the SMP, galvanized the RF/Microwave industry as their use enabled designers to increase package density. This created the ability to stack PC boards while also simplifying the assembly and test of these designs.

Carlisle Interconnect Technologies (CarlisleIT) advances the design of the traditional push-on connectors with our new line of SMP-L connectors by adding a patent pending locking mechanism referred to as Secure-Lok™ to the standard SMP interface. Susceptibility to vibration and other environmental factors has historically limited designers to use threaded connectors such as the SMA, Type N, etc. Secure-Lok™ makes the SMP-L series of push-on connectors ideal for rugged military and commercial applications. SMP-L connectors and cables provide a strong retention force and are also available in sealed IP-67 compliant options.

FEATURES

- » Frequency Range: DC - 40 GHz
- » Unique locking mechanism in a push-on configuration
- » Superior ruggedability and performance compared to standard push-on connectors
- » Fully compatible with SMP standard product line
- » IP67-compliant options available



Secure-Lok™ Mechanism

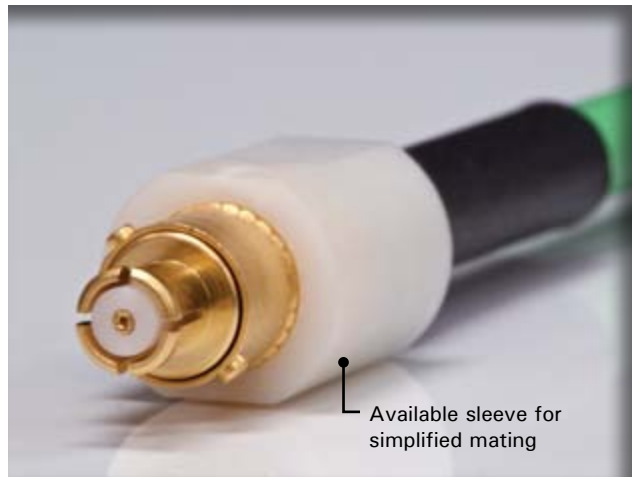
SMP-L™ Interconnect Series

SPECIFICATIONS

Parameter		Specification
Impedance		50 Ω
Frequency range		DC - 40 GHz
VSWR		1.3 : 1 (DC-26 GHz) 1.5 : 1 (26-40 GHz)
Insertion Loss		.06 X √f GHz
DWV @ sea level		500 Vrms
Insulation Resistance		1000 MΩ min
RF High Pot. @ 5MHz:		325 Vrms
Corona Level @ 70,000'		190 Vrms
Inner Conductor Resistance		6.0 MΩ
RF Leakage		-80 dB (DC-3GHz) -65dB (3-18GHz)
Force to Engage	Smooth Bore	1.5 lbs
Force to Disengage	Smooth Bore	1.0 lbs
Coupling Nut Retention Force		>100 lbs
Temperature range		-55°C to +165°C
Environmental	Thermal Shock	MIL-STD-202, Method 107, Cond. B
	Moisture Resistance	MIL-STD-202, Method 106, except step 7b
	Corrosion	MIL-STD-202, Method 101, Cond. B
	Vibration	MIL-STD-202, Method 204, Cond. D
	Shock	MIL-STD-202, Method 213, Cond. I



P698SL-1CC PC Board connector



1-L6L6-794-42XX Cable Assembly

ORDERING INFORMATION

Configuration*	Part Number	Description
Cable Connectors	P657SL-1CC	SMP-L (female) for 0.047" (TLL26-5047) flexible cable
	P657SL-2CC	SMP-L (female) for 0.085" (TLL40-1087) flexible cable
	P657SL-3CC	SMP-L (female) for 0.1111" (TLL40-1111A) flexible cable
PCB Connectors	P606SL-1CC	SMP-L (male) edge mount connector
	P698SL-1CC	SMP-L (male) board mount connector
Shrouds	P674SL-1CCSF	SMP-L (male) thread-in shroud
	P675SL-1	SMP-L press-in shroud
	P678SL-1CCSF	SMP-L (male) 2-hole flange mount connector

*SMP-L product line is compatible with standard SMP connectors. Refer to the SMP product line brochure for selection of Bullets, Field-replaceable connectors, Hermetic, and other configurations.

Cable Assemblies Part Number	Description
1-L6L6-047-42XX	SMP-L (female) to SMP-L (female) 0.047" flexible cable
1-L6L6-794-42XX	SMP-L (female) to SMP-L (female) 0.085" flexible cable
1-L6L6-11A-42XX	SMP-L (female) to SMP-L (female) 0.1111" flexible cable

XX = Length in inches