

Cryogenic RF Choke

3MHz-10GHz /50V DC/SMA

Model: TLBT-3M10G-50-SS-Cryo

TLBT-3M10G-50-SS-Cryo is a cryogenic RF choke that operates from 3MHz to 10 GHz and chock path is DC-500KHz. The cryogenic RF choke offers a typical return loss of -15 dB. The cryogenic RF choke can handle up to +50VDC/600mA bias voltage. The all ports are equipped with SMA female connectors.

Features:

- Ultra Wide Band:3MHz-10GHz
- Low Insertion Loss
- High Voltage
- High Current Capacity
- Operation to 10mK

Applications:

- Test Lab
- Sub-assemblies
- System Integrations

电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency range	RF port: 3MHz-10GHz			
	DC port: DC-500KHz			
回波损耗 Rreturn Loss		-15		dB
隔离 Isolation		55		dB
直流电压 DC Voltage			50	V DC
直流电流 DC Current		600		mA

机械特性 Mechanical Specifications:

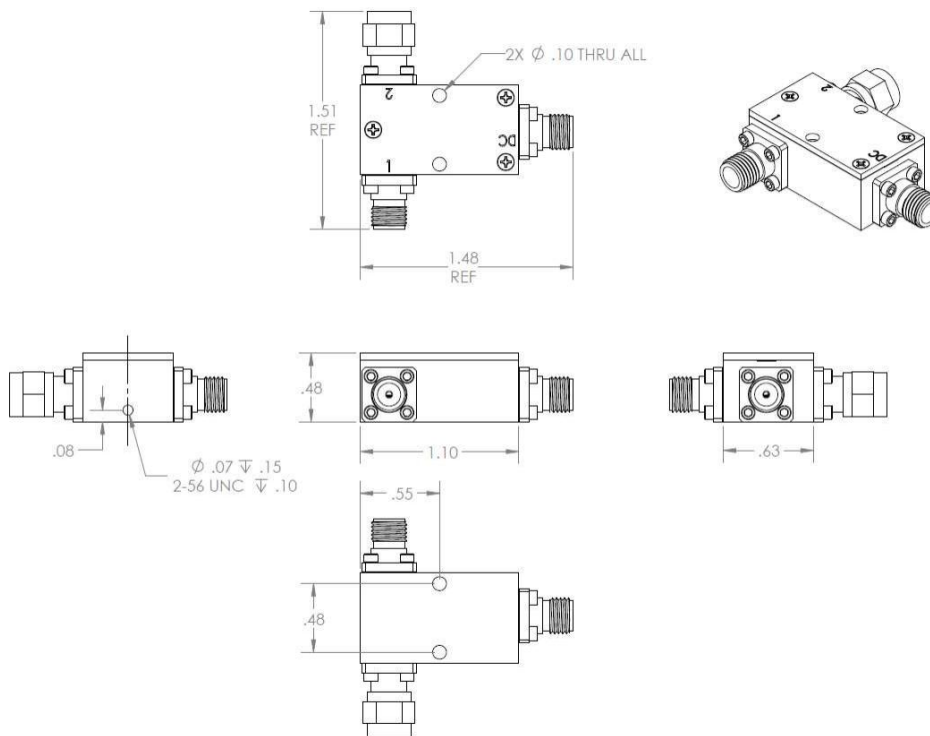
参数 Parameter	指标 Value	单位 Units
射频输入/输出接口 RF Input /Output Connector	SMA Female/SMA Female	
直流接口 DC Connector	SMA Female	
表面处理 Finish	Gold plated	
尺寸 Dimension	1.51*1.48*0.48	Inch

绝对最大值 Absolute Maximum Ratings:

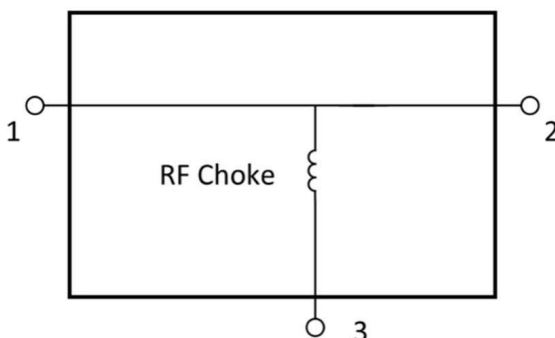
参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+50 V
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形图 Outline Drawing:

Unit:Inch



原理框图 Block Diagram:



温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

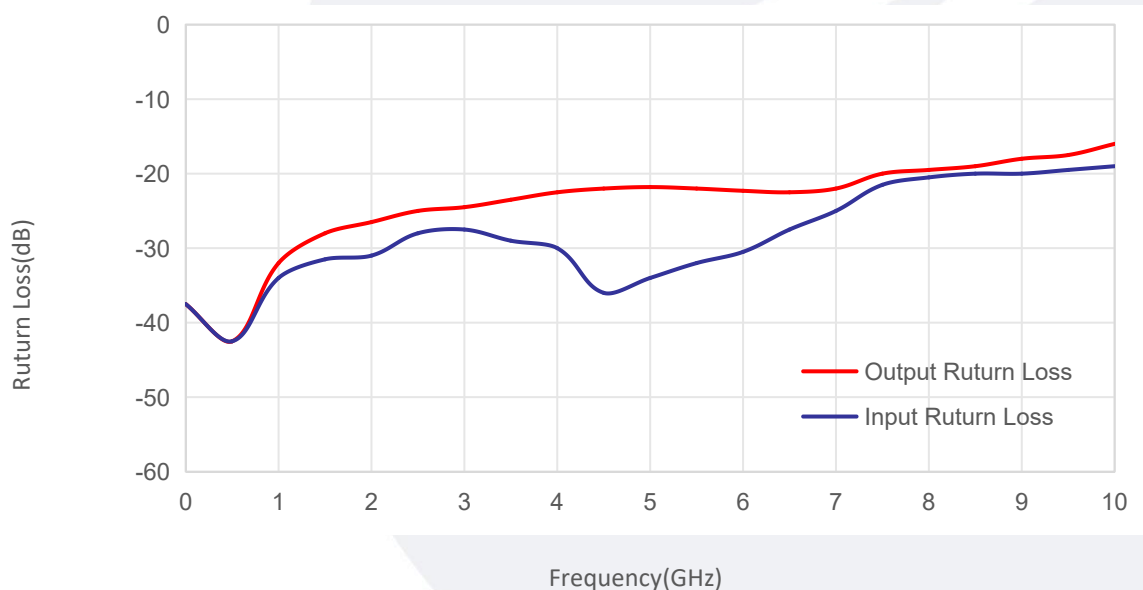
标准型号 Base Number	描述 Description	版本号 Revision
TLBT-3M10G-50-SS-Cryo	Cryogenic RF Choke SMA,3MHz-10GHz,+50V	Rev.1.1

Notes:

1. All data taken @ +23° C unless otherwise specified.
2. Dimensions and specifications may be changed without prior notice.

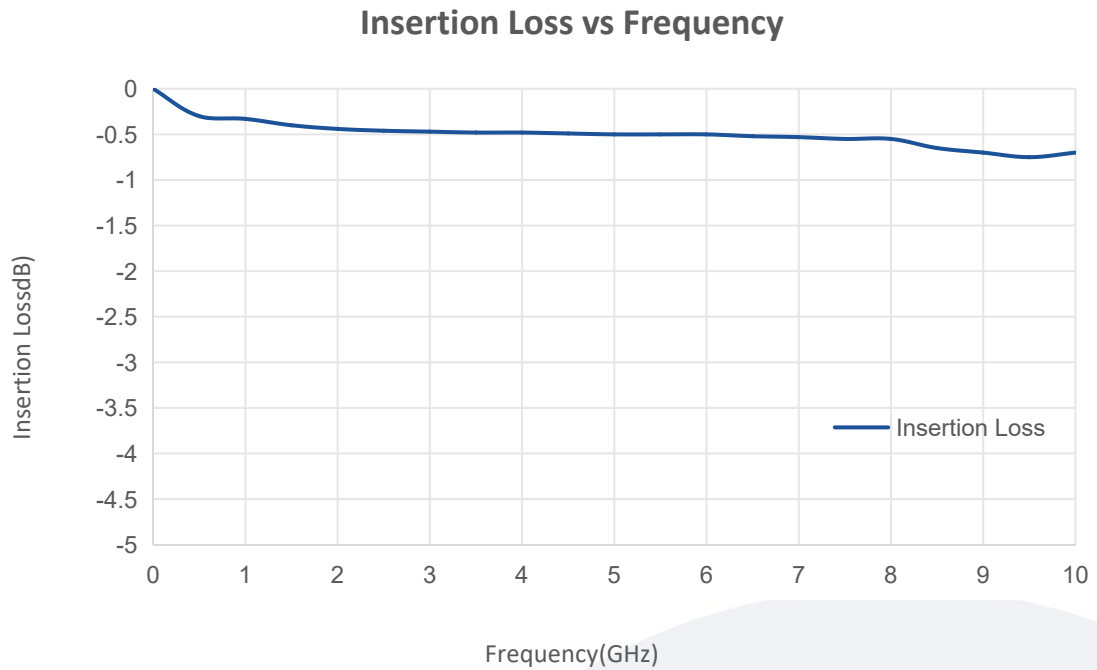
典型曲线 Typical Performance Data:

Return Loss vs Frequency



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

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