

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

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	RF port: 3MHz-10GHz			
	DC port: DC-500KHz			
Return Loss		-15		dB
Isolation		55		dB
DC Voltage			50	V DC
DC Current		600		mA

Mechanical Specifications:

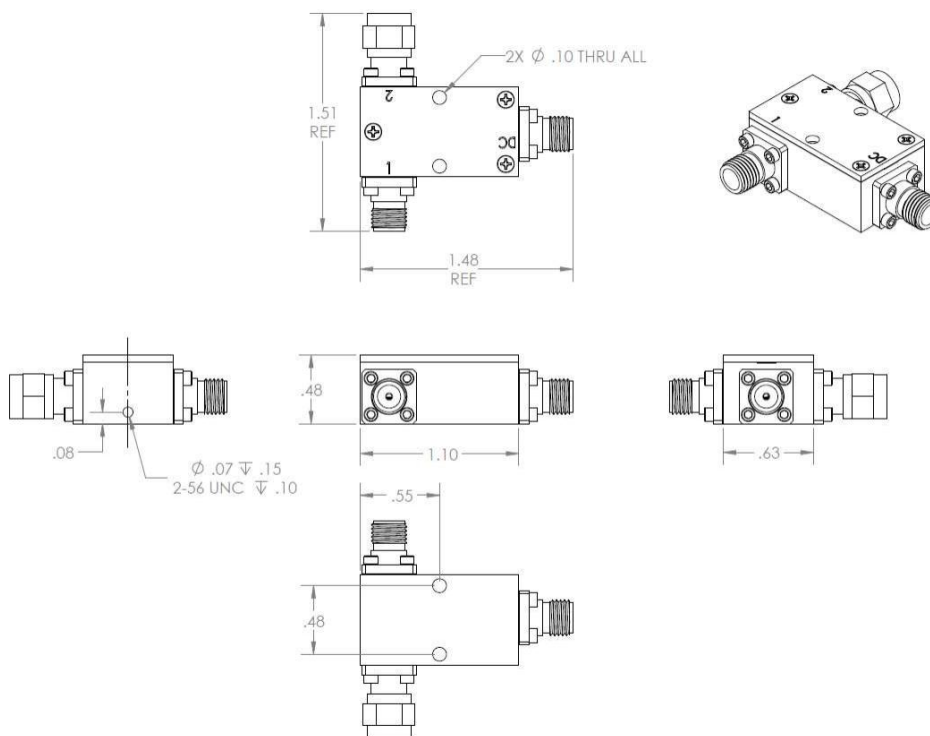
Parameter	Value	Units
RF Input /Output Connector	SMA Female/SMA Female	
DC Connector	SMA Female	
Finish	Gold plated	
Dimension	1.51*1.48*0.48	Inch

Absolute Maximum Ratings:

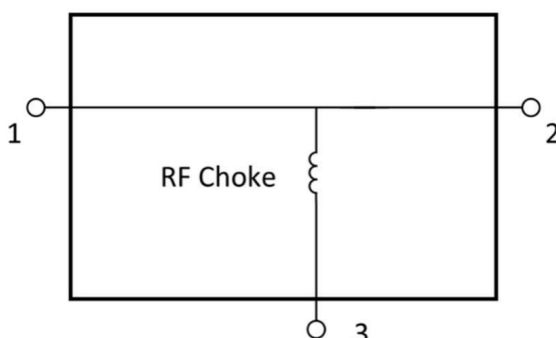
Parameter	Value
Supply Bias Voltage	+50 V
ESD sensitivity (HBM)	Class 0, passed 150V

Outline Drawing:

Unit:Inch



Block Diagram:



Environmental Conditions:

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

Ordering Information:

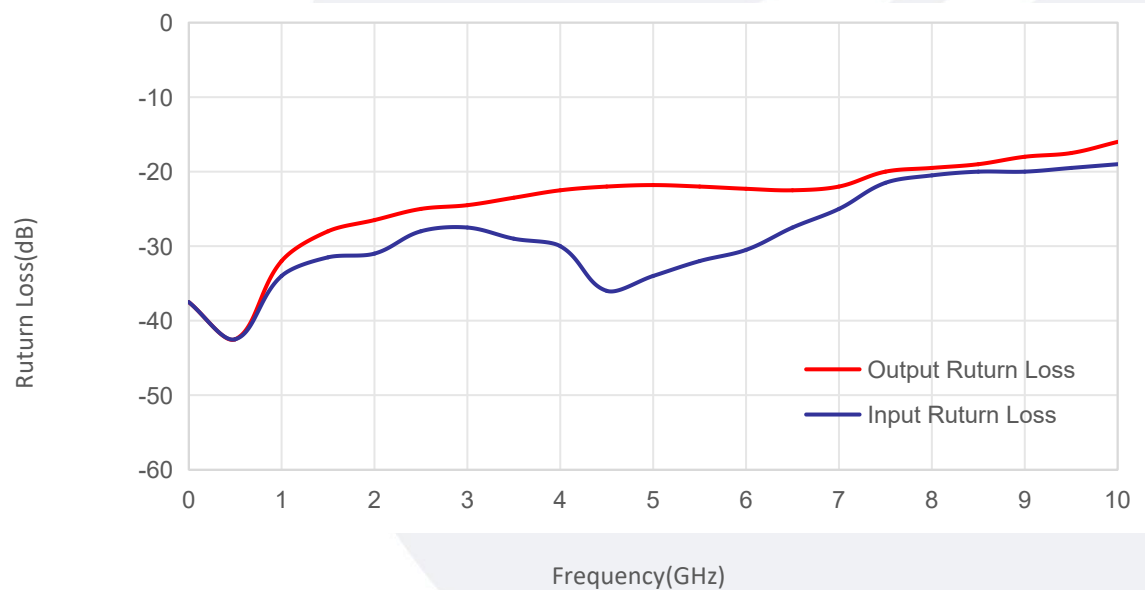
Base Number	Description	Revision
TLBT-3M10G-50-SS-Cryo	Cryogenic RF Choke SMA,3MHz-10GHz,+50V	Rev.1.1

Notes:

1. All data taken @ +23° C unless otherwise specified.
2. Dimensionsandspecificationsmay be changed withoutprior notice.

Typical Performance Data:

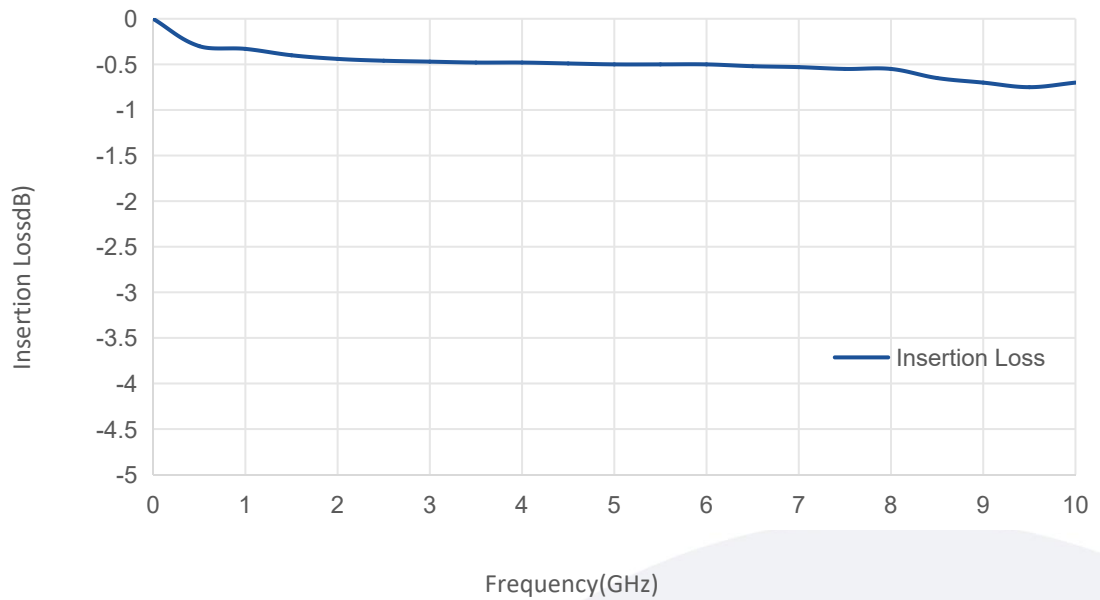
Return Loss vs Frequency



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.

Typical Performance Data:

Insertion 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.