

Model: TLSP8T0.5G40GA
Absorption, Broadband FET Switch, 0.5-40GHz,
Feature:

- Ultra Broadband: 0.5-40 GHz
- Low Insertion Loss: 8.0 dB
- Power Handling : 25 dBm
- High Isolation
- Switch Type: Absorption

Electrocal Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	0.5-40			GHz
Isolation	55	70		dB
Insertion Loss		8		dB
Input VSWR		2	3	:1
Output VSWR		2	3	:1
Switch Speed		50	100	ns
RF Input Power			25	dBm
Control Logic TTL	0/+5			V
DC Voltage		+12		V DC
DC Supply Current		30		mA
Switch Type	Absorption			
Impedance	50			Ohms

Mechanical Specifications:

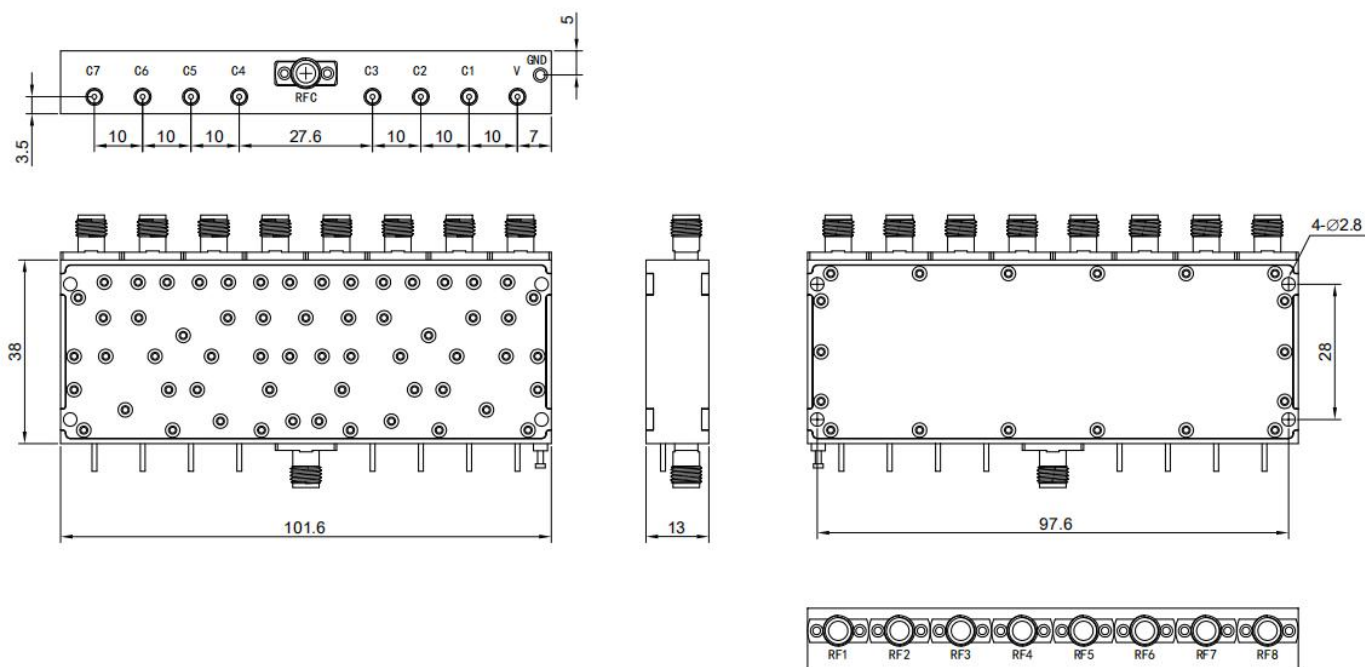
Parameter	Value	Units
Input /Output Connector	2.92mm Female	
Control Bias	Solder Pin	
Size	101.6*38*13	mm

Absolute Maximum Ratings :

Parameter	Value
Supply Bias Voltage	+/-10%
RF Input Power	25 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit: (mm)



TTL Control Voltages & VDD	
Stage	Bias Condition
+V	+12V ($\pm 10\%$)
Low	0 to 0.8Vdc
High	+5.0Vdc

Control Input TTL							Signal Path State
C1	C2	C3	C4	C5	C6	C7	
0	1	1	1	1	0	0	J0-J1
0	1	1	0	1	0	0	J0-J2
0	1	1	1	0	0	0	J0-J3
0	1	1	0	0	0	0	J0-J4
1	0	0	0	0	1	1	J0-J5
1	0	0	0	0	0	1	J0-J6
1	0	0	0	0	1	0	J0-J7
1	0	0	0	0	0	0	J0-J8
1	1	1	0	0	0	0	OFF

Environmental Conditions:

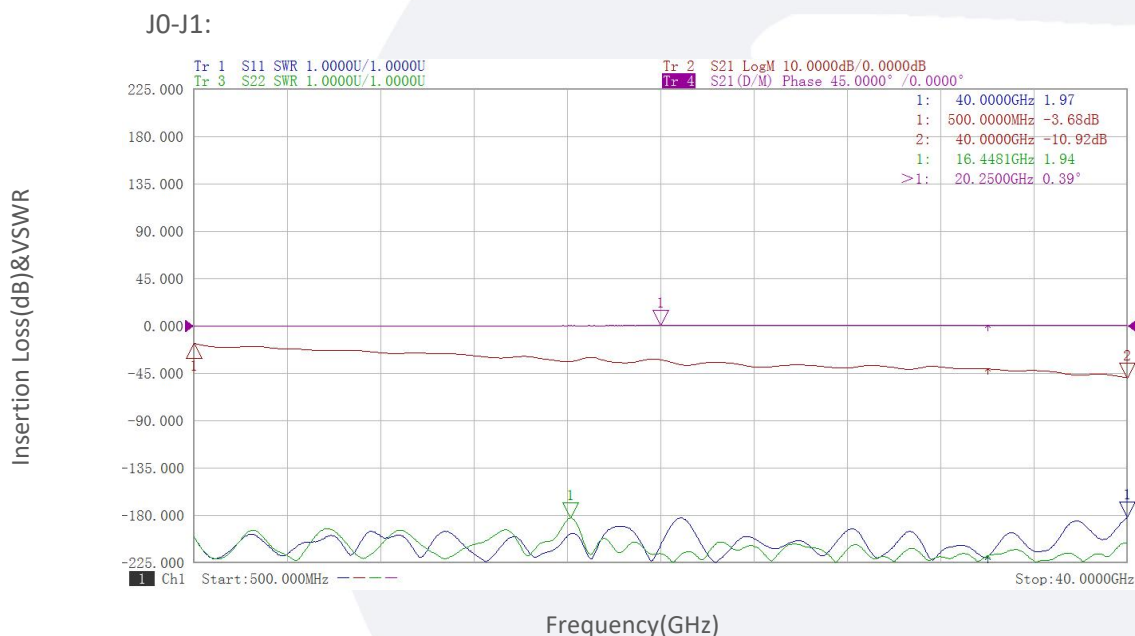
Parameter	Min	Typ	Max	Units
Operating Temperature	-20		+70	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Part Number	Description	Revision
TLSP8T0.5G40GA	Absorption,Broadband FET Switch 0.5-40GHz,SP8T,2.92 Female	Rev.1.1

Typical Performance Data:

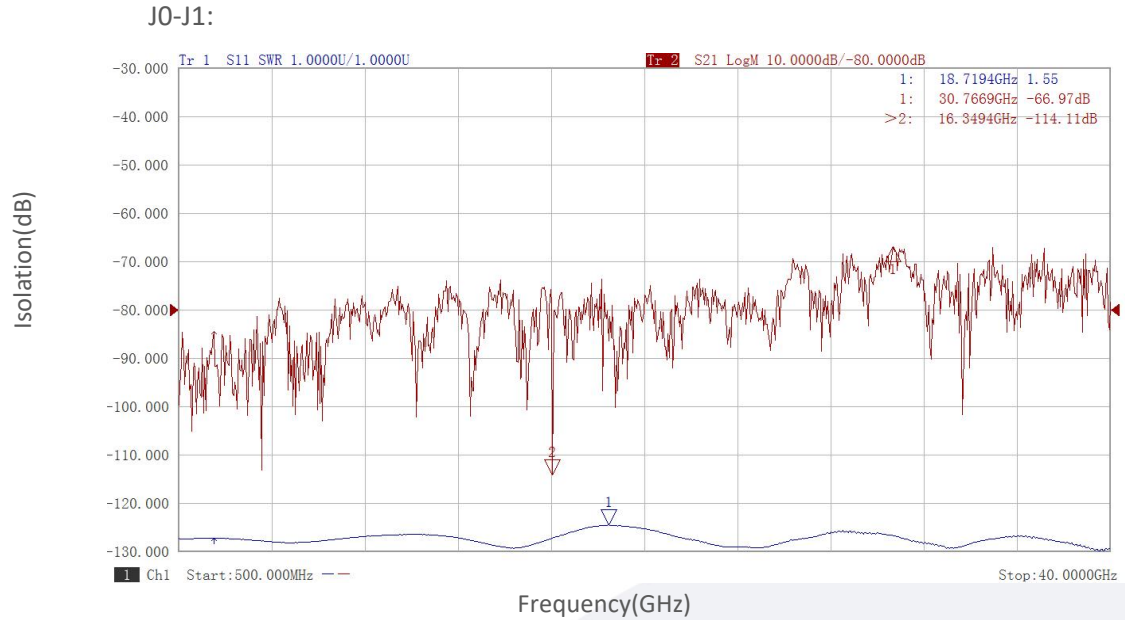
Insertion Loss&VSWR vs Frequency



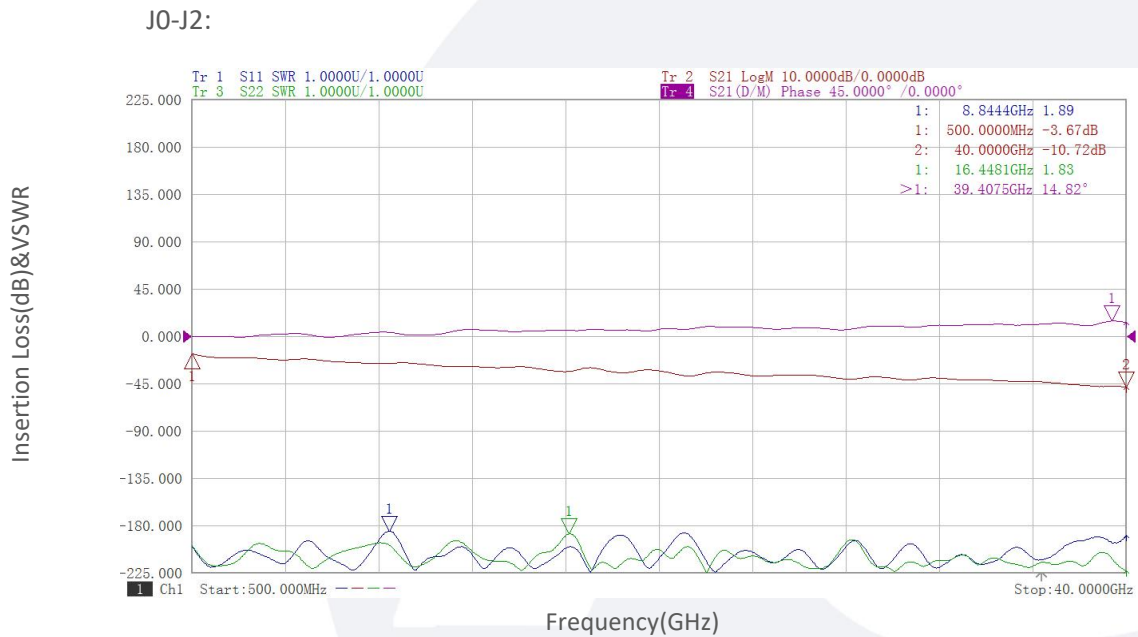
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

Isolation vs Frequency



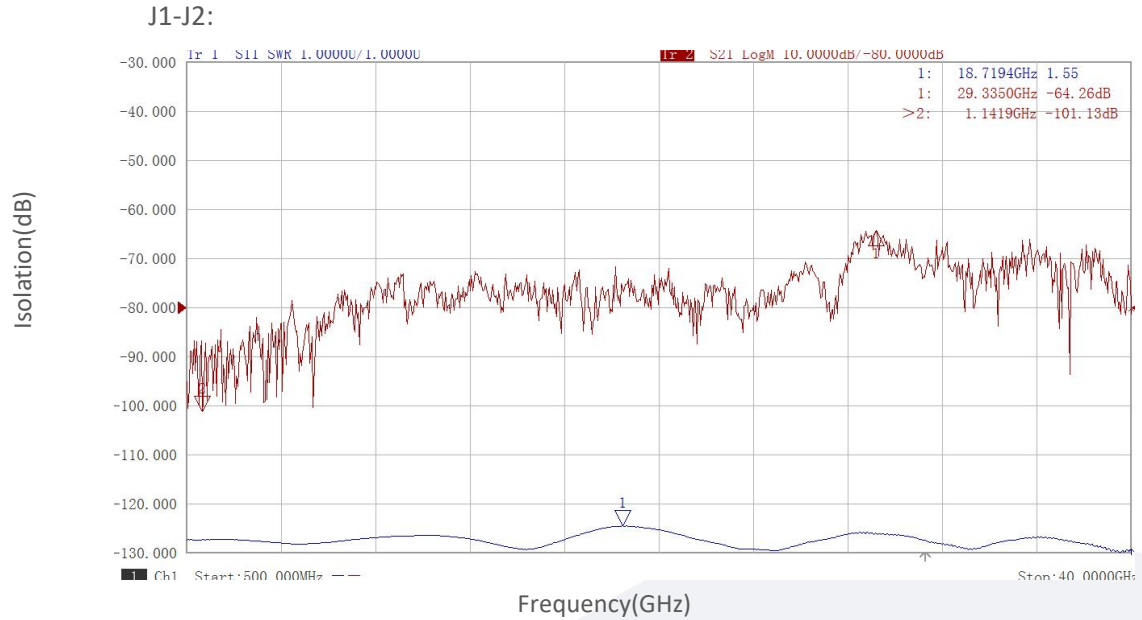
Insertion Loss & VSWR vs Frequency



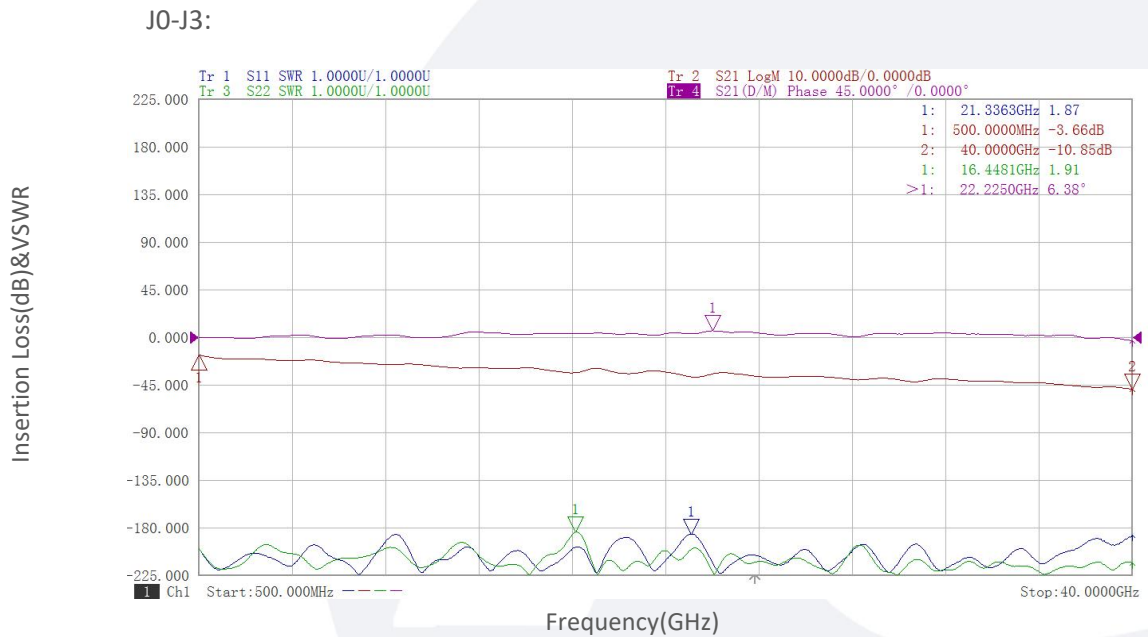
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Typical Performance Data:

Isolation vs Frequency



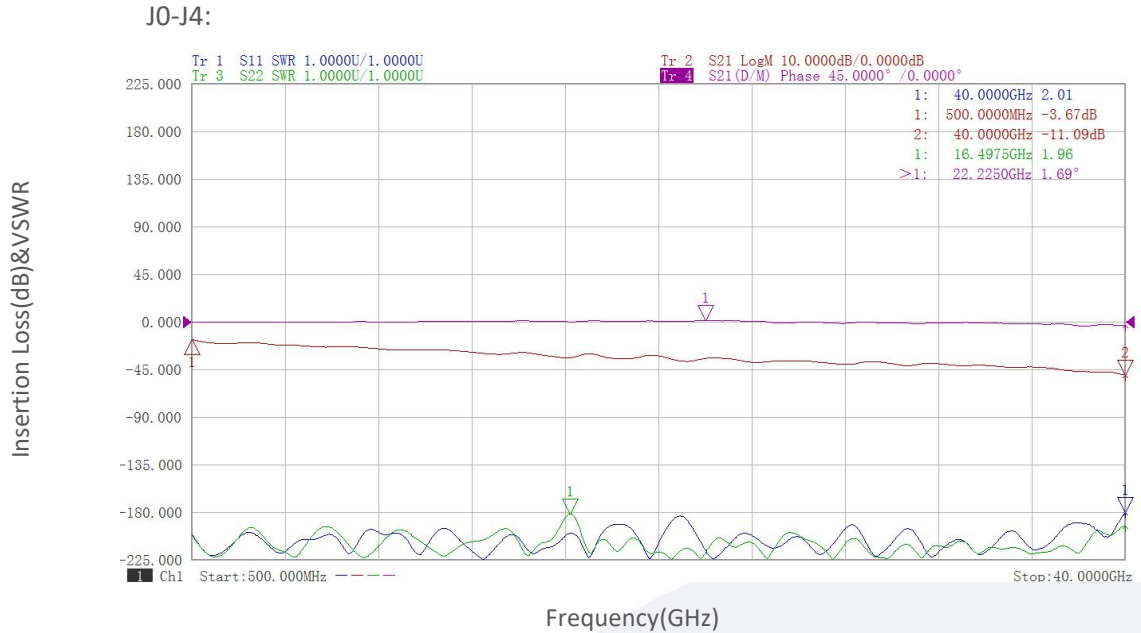
Insertion Loss & VSWR vs Frequency



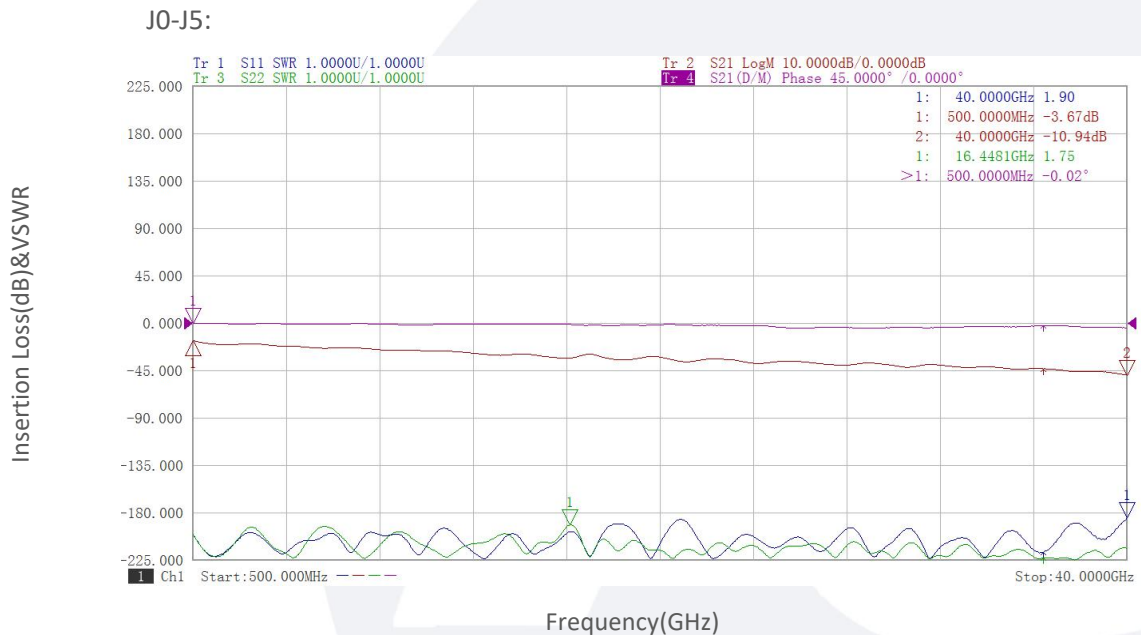
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Typical Performance Data:

Insertion Loss&VSWR vs Frequency



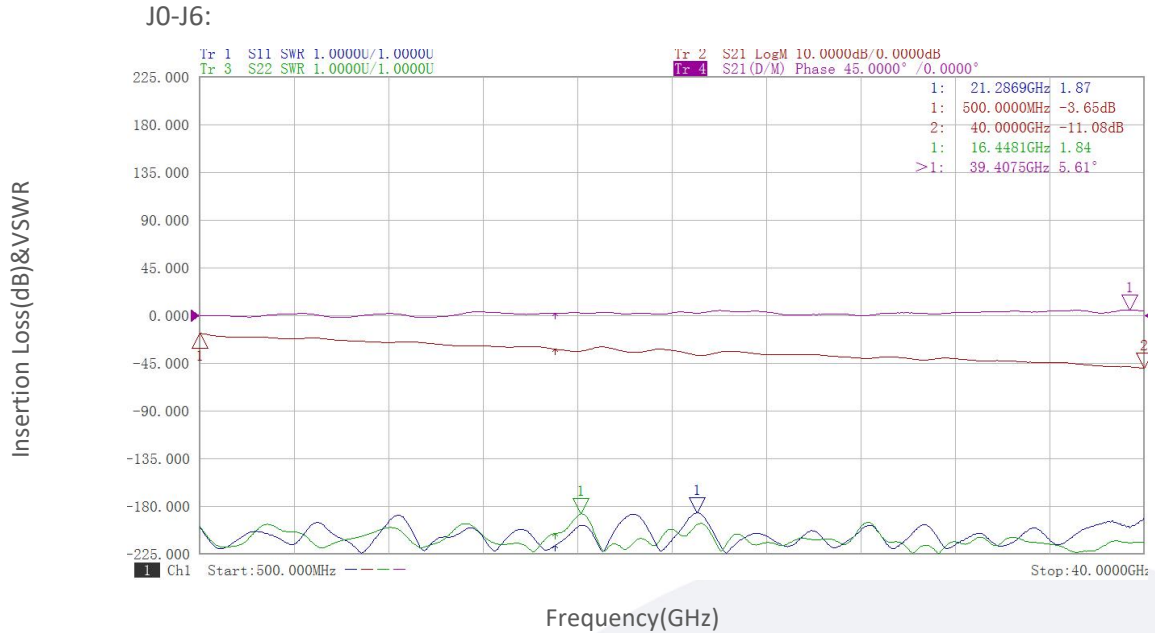
Insertion Loss&VSWR vs Frequency



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Typical Performance Data:

Insertion Loss&VSWR vs Frequency



Insertion Loss&VSWR vs Frequency



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