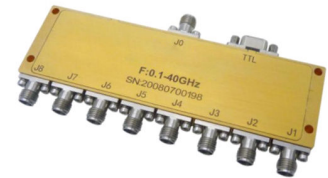




Absorptive 0.1-40GHz Coaxial SP8T Switch

Features

- Ultra Wide Band Operation 0.1-40GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Customization available upon request



Typical Applications

- Wireless Infrastructure
- 5G communication
- Test and measurement Instrument

RF Microwave & VSAT
Fiber Optics

Parameters	Min	Typ.	Max	Min	Typ.	Max	Units
Frequency Range	0.1		18	18		40	GHz
Insertion Loss		7.0	9.0		8.5	11.0	dB
Insertion Loss Temperature Coefficient		0.003			0.003		dB/ °C
Isolation	70	75		65	70		dB
Input VSWR		2.5	3		2.5	3	: 1
Output VSWR		2.5	3		2.5	3	: 1
RF Input power			23			23	dBm
DC Power Dissipation		0.8			0.8		W
0.1dB Compression Point(P0.1dB)		23			23		dBm
IIP3		42			35		dBm
Switching Speed	100 Max.						ns
Weight	3.2Max.						ounces
Impedance	50						Ω
Bias Current (+5V/-15V)	350/80 Max.						mA
Input / Output Connectors	2.92 mm - Female						
Finish	Gold Plated						
Material	Aluminum						
Sealing	Hermetically Sealed (optional)						



Absolute Maximum Ratings

Biasing	+5V $\pm$ 10%/-15V $\pm$ 10%
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Ordering Information

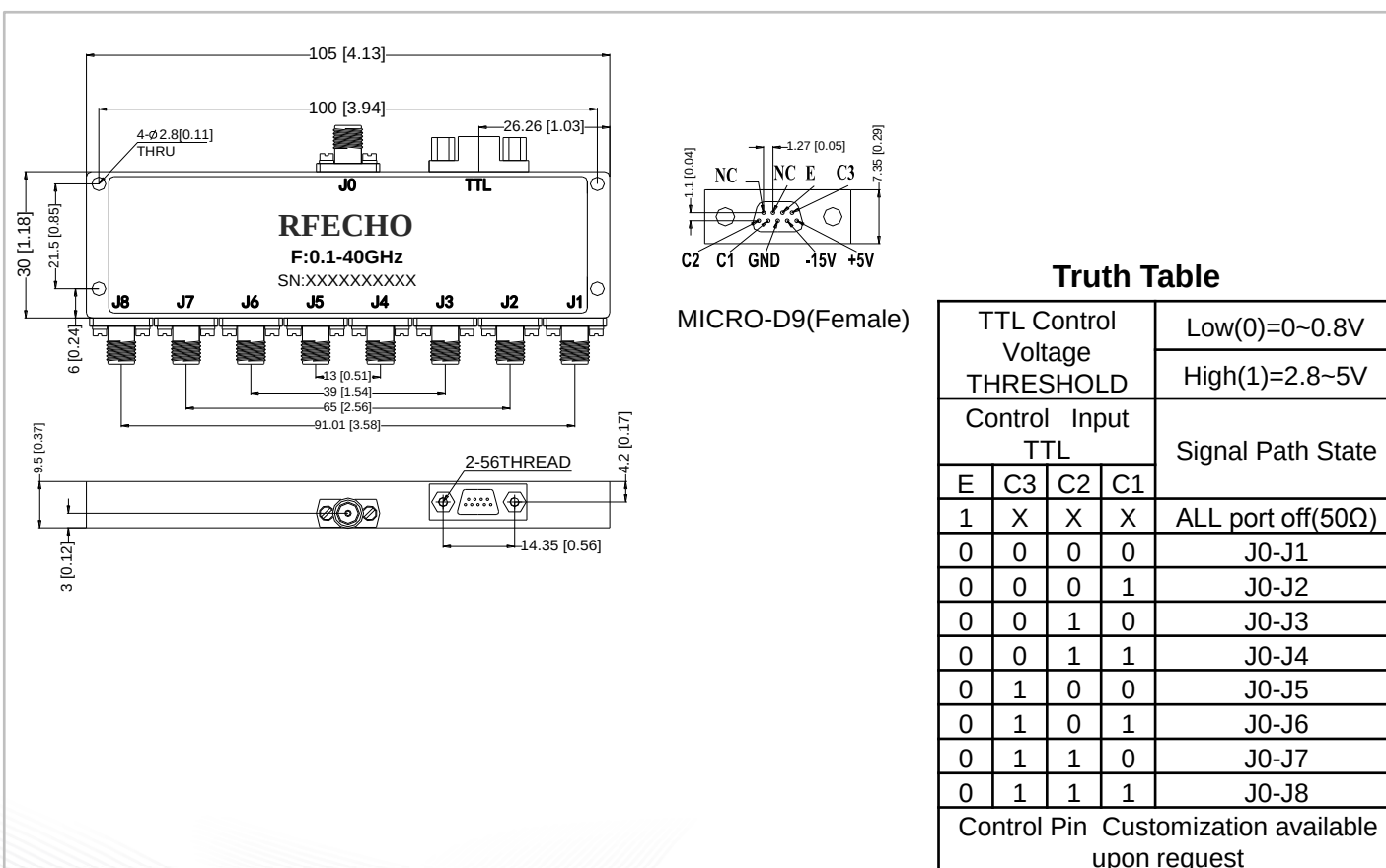
Part No.	Description
DBSA0800104000B	SP8T 0.1-40GHz PIN Diode Switch

Environmental Specifications

Operational Temperature	-40°C~+85°C
Storage Temperature	-50°C~+105°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C, 95%RH at 40°C
Shock	20G for 11msec half sine wave, 3 axis both directions

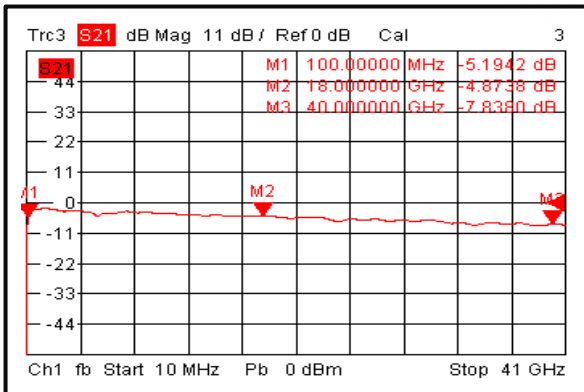
Outline Drawing:

All Dimensions in mm (inches) Housing Tolerances $\pm 0.2(0.008)$

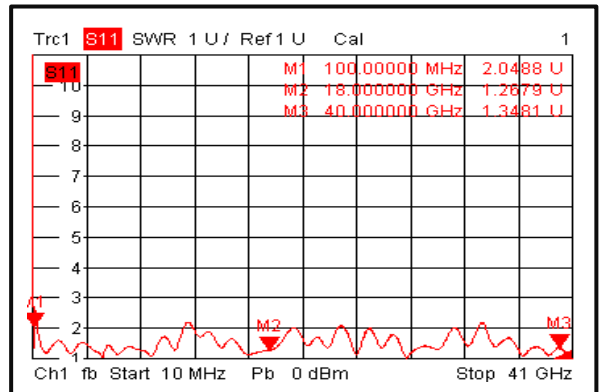




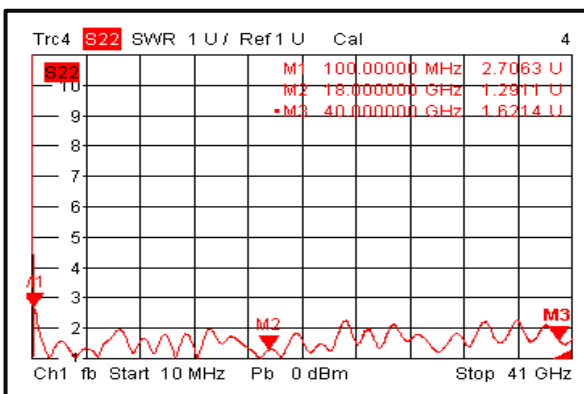
Insertion Loss @+25°C



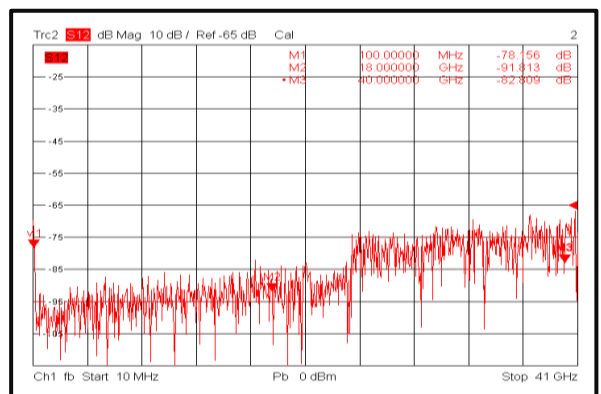
Input VSWR @+25°C



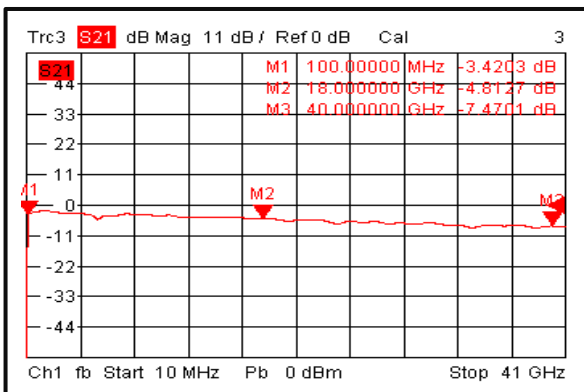
Output VSWR @+25°C



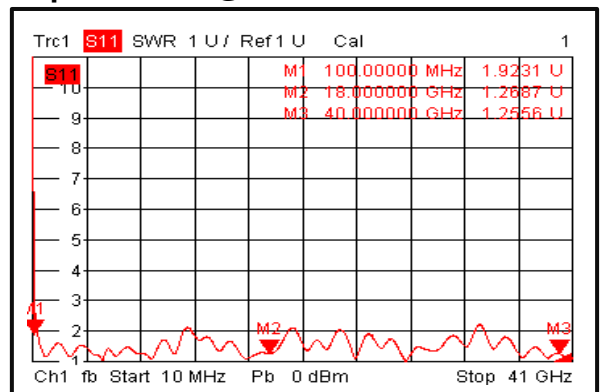
Isolation @+25°C



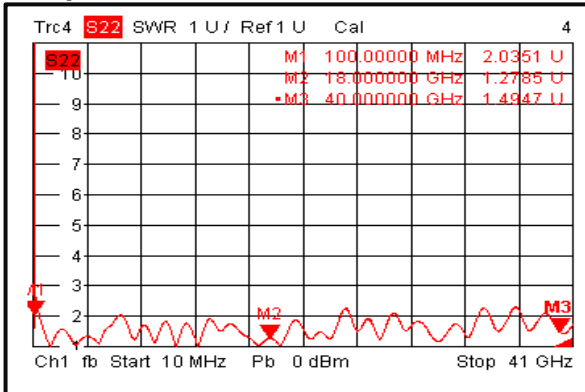
Insertion Loss @-40°C



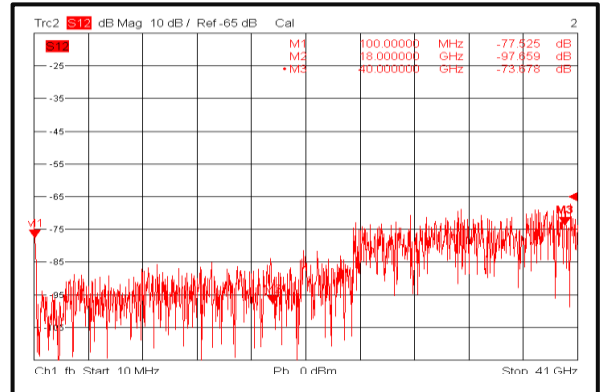
Input VSWR @-40°C



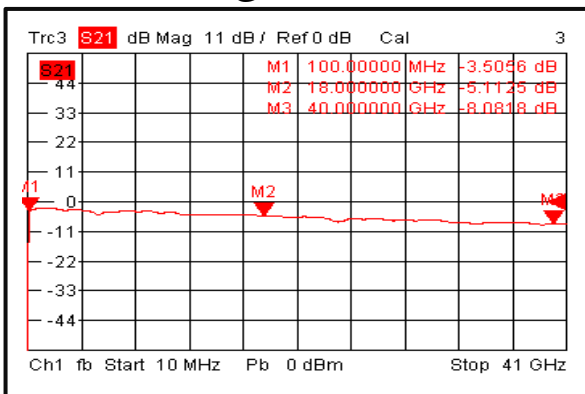
Output VSWR @-40°C



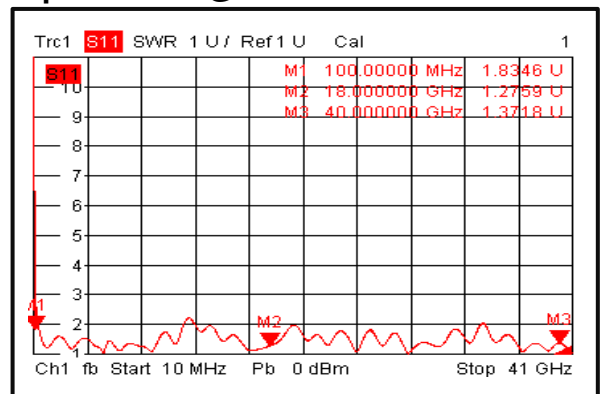
Isolation @-40°C



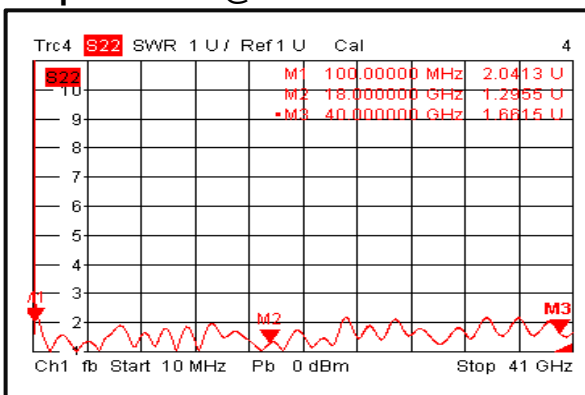
Insertion Loss @+85°C



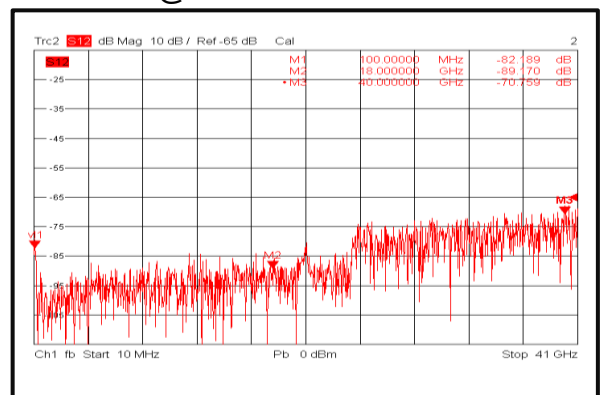
Input VSWR @+85°C



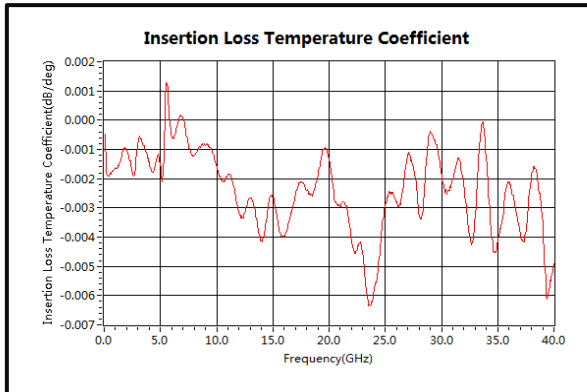
Output VSWR @+85°C



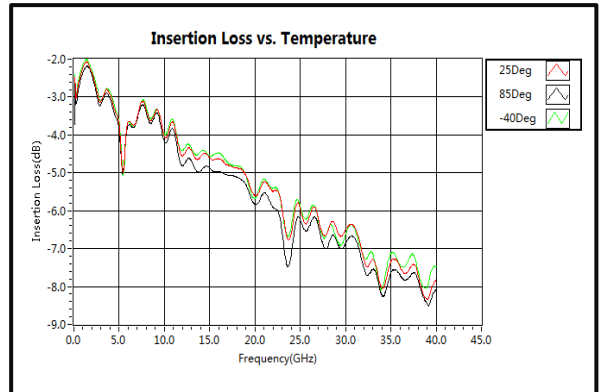
Isolation @+85°C



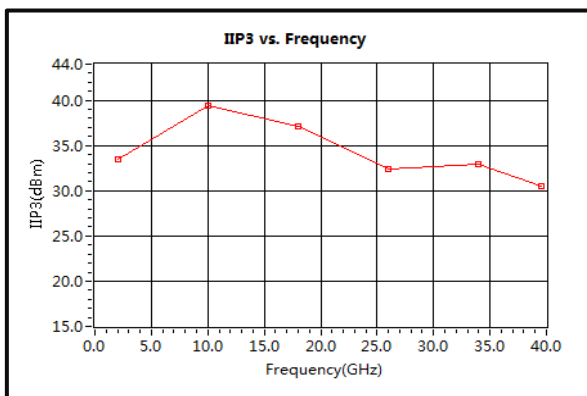
Insertion Loss Temperature Coefficient



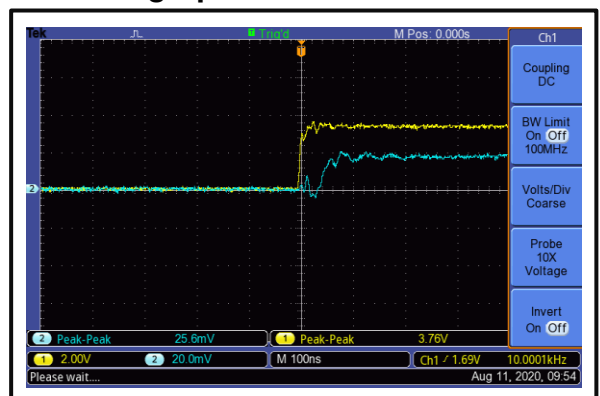
Insertion Loss vs. Temperature



IIP3



Switching Speed



Switching Speed

