

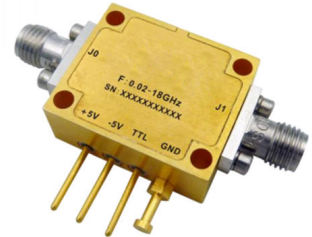


Reflective 0.02-0.5GHz Coaxial SP2T Switch

Features

- Wide Band Operation 20-500MHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- High Power Cold Switching

040-OSR0200020050C



Typical Applications

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

RF Microwave & VSAT
Fiber Optics

Parameters	Min	Typ.	Max	Units
Frequency Range	20		500	MHz
Insertion Loss			1.0	dB
Insertion Loss Temperature Coefficient		0.003		dB/ ° C
Isolation	40			dB
Input VSWR			1.5	: 1
Output VSWR			1.5	: 1
RF Input Power Pulse 1% duty cycle (1us)			500	W
DC Power Dissipation		1		W
0.1dB Compression Point (P0.1dB)		50		dBm
IIP3		55		dBm
Switching Speed		2.5	3	us
Weight				ounces
Impedance	50			Ω
Bias Current (+5V)	200			mA
Input / Output Connectors	N-Female			
Finish	Gold Plated			
Material	Aluminum			
Sealing	Hermetically Sealed (Optional)			



Absolute Maximum Ratings

Biassing	+5V ± 10%
----------	-----------

Ordering Information

Part No.	Description
DBSR0200020050C	SP2T0.02-0.5GHz 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 ± 0.2(0.008)

The drawing shows three views of the device: a top view with dimensions (10, 12, 17, 20, 22, 43, 50, 52, 55), a front view with labels (J1, J2, J0, RFECHO, F:20-500MHz, SN:XXXXXXXXXX, +5V, GND, TTL, 4-φ 3.2[0.126] THRU, 40, 50, 80, 92) and a side view with dimensions (12, 37). A note indicates 'Including Heat sink'.

TTL Control Voltage THRESHOLD	Signal Path State
Low(0)=0~0.8V	J1
High(1)=2.8~5V	J2

Control Pin Customization available upon request