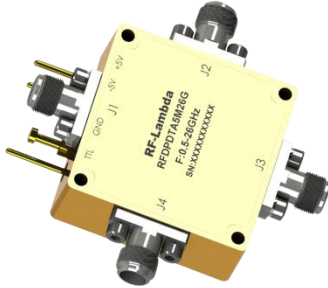


Wide Band Coaxial DPDT Switch 0.5 - 26GHz



Features

- Ultra Wide Band Operation 0.5-26GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation

Typical Applications

- Wireless Infrastructure
- Test and Measurement
- Military and Aerospace

Wide Band Double Pole Double Throw Switch 0.5 - 26GHz

Electrical Specifications, $T_A = +25\text{ }^\circ\text{C}$, $V_{dd} = +5\text{V}/-5\text{V}$, $TTL = 0 / +5\text{V}$

Description	PN: RFDPDTA5M26G						
	DPDT Switch						
	Low Power Cold Switching						
Parameters	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range	0.5		18	18		26.5	GHz
Insertion Loss		4.0	5.0		5.0	6.0	dB
Insertion Loss Temperature Coefficient		0.003			0.003		dB/°C
Isolation	40	45		40	45		dB
Input VSWR		2.0	2.5		2.0	2.5	:1
Output VSWR		2.0	2.5		2.0	2.5	:1
RF Input Power			23			23	dBm
DC Power Dissipation		0.6			0.6		W
0.1dB Compression Point (Po.1dB)		23			23		dBm
IIP3		43			42		dBm
Switching Speed	100 Max.						ns
Weight	/						ounces
Impedance	50						Ω
Bias Current (+5V / -5V)	120 / 100 Max.						mA
Input / Output Connectors	SMA-Female						
Finish	Gold Plated						
Material	Aluminum						
Sealing	Hermetically Sealed (Optional)						

Absolute Maximum Ratings

Biassing	+5V±10%/-5V±10%
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Note: TTL pins cannot be connected to the negative voltage otherwise the internal driver will be damaged.

Ordering Information

Part No.	Description
RFDPDTA5M26G	DPDT 0.5-26GHZ PIN Diode Switch

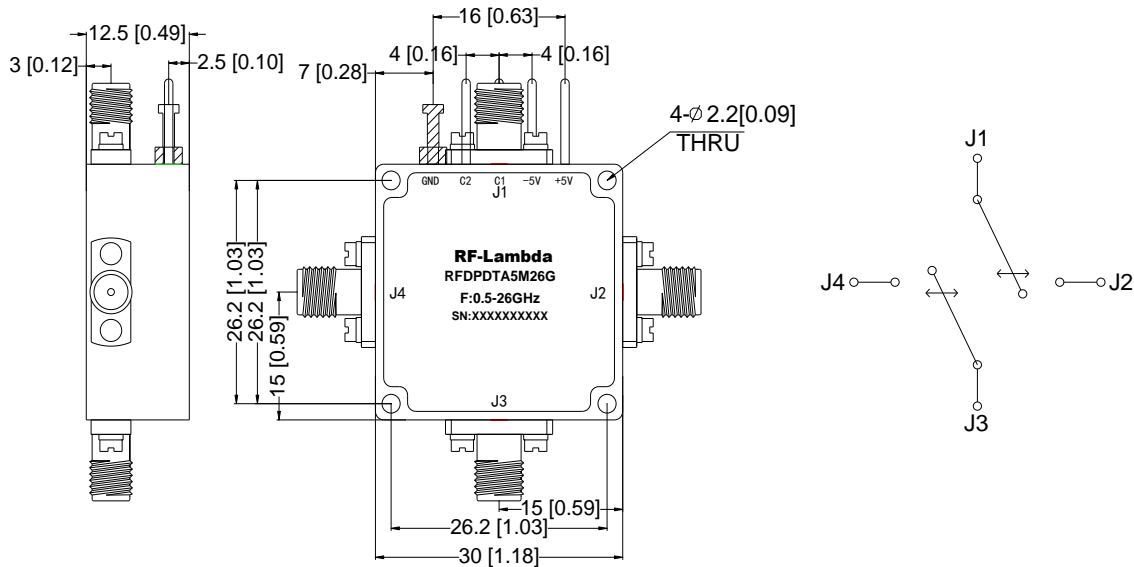
Environmental Specifications and Test Standards

Parameter	Description
Operational Temperature	-40°C~+85°C (Case Temperature)
Storage Temperature	-50°C~+105°C
Thermal Shock	-45°C → +85°C (5 Cycles / 10 hours)
Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
High Temperature Burn In	Temperature +85°C for 72 Hours
Shock	1. Weight >20g, 50g half sine wave for 11ms, Speed variation 3.44m/s 2. Weight <=20g, 100g Half sine wave for 6ms, Speed variation 3.75m/s 3. Total 18 times (6 directions, 3 repetitions per direction).
Altitude	Standard: 30,000 Ft (Epoxy Sealed Controlled Environment) Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min)
Hermetically Sealed (Optional)	MIL-STD-883 (For Hermetically Sealed Units)

Wide Band Double Pole Double Throw Switch 0.5 - 26GHZ

Outline Drawing:

All Dimensions in mm [inches]



Truth Table

TTL Control Voltage THRESHOLD		Low(0)=0~0.8V	
		High(1)=2.8~5V	
Control Input TTL		Signal Path State	
1	0	J1-J2(IL state) J3-J4(IL state)	J1-J4(ISO state) J2-J3(ISO state)
0	1	J1-J2(Isolation state) J3-J4(Isolation state)	J1-J4(IL state) J2-J3(IL state)
1	1	All OFF	
Control Pin Customization available upon request			



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