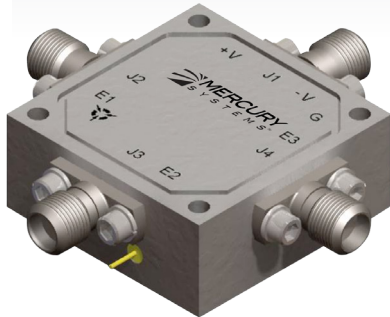


SP3T Pin Diode Switches 0.5-18 GHz



The Mercury Systems PIN diode SP3T switch family spans the frequency range of 0.5 – 18 GHz. It offers high performance and an integrated high speed driver controlled by TTL or CMOS signals. This switch will maintain high performance as a drop in device for system or subsystem requirements. The Mercury Systems family of high performance switches is available in military or non military versions, hermetic and non-hermetic.

Applications

EW systems
Communications systems
Antenna/Filter Selectors

Features

Broadband units
Environmentally sealed
-55° C to +95° C operation
Shock/vibration/acceleration capable

SP3T Specifications

Band	Frequency GHz	Reflective			Absorptive			Switching Speed (nS MAX)
		Insertion Loss (dB MAX)	VSWR (MAX)	Isolation (dB MIN)	Insertion Loss (dB MAX)	VSWR (MAX)	Isolation (dB MIN)	
1	0.5 - 2	1.5	1.6	80	1.6	1.6	80	100
2	2 - 6	1.5	1.7	70	1.6	1.7	75	100
3	6 - 18	3.0	2.0	60	3.2	2.0	65	100
4	2 - 18	3.1	2.0	60	3.3	2.0	65	100
5	0.5 - 18	3.2	2.0	60	3.4	2.0	65	100

Power Supply Option

Code ± 5%	A	B	C	Current (mA MAX)
+V	+5V	+5V	+12 to +15V	80
-V	-5V	-12 to -15V	-12 to -15V	50

Control Logic Option

Control Logic	Switch State	
	Normal N	Inverting I
TTL 0	Ins. Loss	Isolation
TTL 1	Isolation	Ins. Loss

Specifications

Switching Speed measured from 50% control to 10/90% RF
 Max. RF Power (Operational/Survival) 0.5W / 1W
 Storage Temperature -65° to +150°C
 Finish Gray Epoxy Paint per MIL-C-22750
 Weight 1.5 oz. Max
 Control E1 Controls J1-J2
 E2 Controls J1-J3
 E3 Controls J1-J4

Ordering Information

SA4NA3

Absorptive - SA
 Reflective - SR

SP3T, 3
 Power Supply Option, A-C
 Control Logic Option, N-I

Frequency band, 1-5

Outline Drawing

