# High-Speed Switch SP3T Absorptive



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

nercur systems

Specifications are subject to change without notice

## **SP3T Specifications**

Band	Frequency GHz	Reflective			Absorptive			Switching Speed
		Insertion Loss (dB MAX)	VSWR (MAX)	Isolation (dB MIN)	Insertion Loss (dB MAX)	VSWR (MAX)	Isolation (dB MIN)	(nS MAX)
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%	Α	В	С	Current (mA MAX)
+V	+5V	+5V	+12 to +15V	80
-V	-5V	-12 to -15V	-12 to -15V	50

#### **Control Logic Option**

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

#### **Specifications**

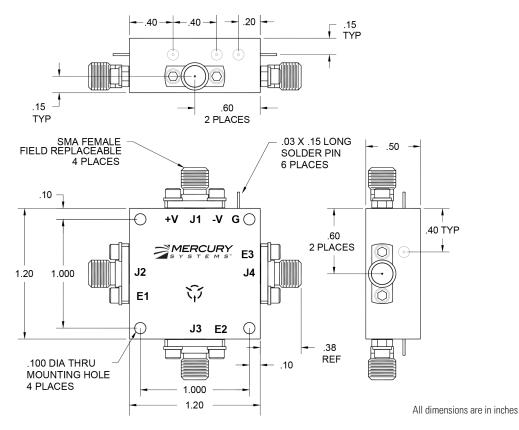
Switching Speed measured	sured from 50% cor	ntrol to 10/90% RF
Max. RF Power (Operational/Survival)		0.5W / 1W
Storage Temperature		-65° to +150°C
Finish	Gray Epoxy Paint	per MIL-C-22750
Weight		1.5 oz. Max
Control	E	E1 Controls J1-J2
	E	2 Controls J1-J3
	E	E3 Controls J1-J4

# Ordering Information





# **Outline Drawing**



#### Need More Help? Need a Variant of This Product?

Contact Mercury's RF & Microwave engineering team at rf.microwave@mrcy.com or visit www.mrcy.com/rf for a detailed listing of RF and Microwave products.



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