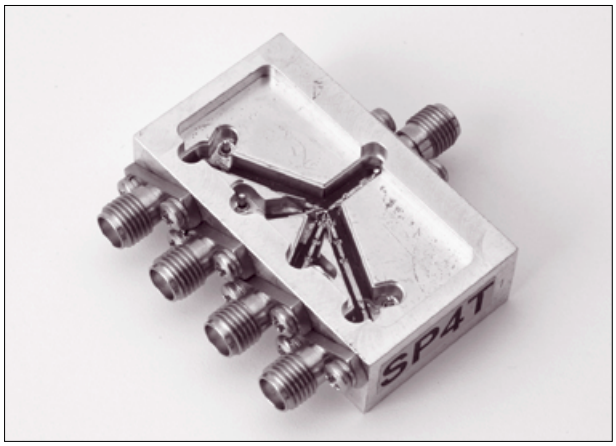
SP4T PIN Diode Switches

HIGH FREQUENCY

Series MW 124T

- Solid State
- Frequency Band 0.5 to 18 GHz
- Low Insertion Loss
- High Isolation
- Integral TTL Driver
- Hermetically Sealed



GENERAL INFORMATION

This series of SP4T switches is designed to give excellent performance for a wide range of military system applications in the 0.5 GHz to 18 GHz frequency range.

GENERAL SPECIFICATIONS

Power Handling Capability	100 mW
Operating Temperature Range	-55°C to +105°C
Storage Temperature Range	-65°C to +125°C
Reflective Switching Speed	25 ns typical
Non-Reflective Switching Speed	25 ns typical

OPTIONS

- Low Video Leakage
- Switches Without Drivers
- Another Frequency Band
- Lower Insertion Loss Can Be Provided

HOW TO ORDER

See the variety of switches on the next page, and follow the example below:

$$\frac{\text{MW 124 T28}}{1} - \frac{\text{H}}{2} - \frac{\text{H}}{3} - \frac{0}{4} - \frac{\text{A}}{5} - \frac{\text{Q2}}{6}$$

= MW 124T28HH0AQ2

LEGEND

1. Basic model number for an SP4T switch
2. Isolation (Reflective or Non-Reflective)
   H - High, 60 dB L - Low, 40 dB
3. Switching Speed

	Reflective	Non-Reflective
H - High	20 ns	25 ns
L - Low	100 ns	150 ns

4. TTL Control Logic
   0 - Logic "0" Low Loss
   Logic "1" Isolation
   1 - Logic "0" Isolation
   Logic "1" Low Loss
5. Power Supply
   a. Voltage

A - +5V	-12V
B - +5V	-15V
C - +12V	-12V
D - +15V	-15V

   b. Current

High Speed	+140 mA (+V) - 40 mA (-V)
Low Speed	+160 mA (+V) - 60 mA (-V)

6. Case type

SPECIFICATIONS

MW 124T High Isolation / High Speed / Low Speed Switches

High Frequency Reflective Switches

	Frequency (GHz)																	
	0.5 to 1			1 to 2			2 to 4			4 to 8			8 to 12			12 to 18		
Model Number	IL max (dB)	Isolation min (dB)	VSWR max	IL max (dB)	Isolation min (dB)	VSWR max	IL max (dB)	Isolation min (dB)	VSWR max	IL max (dB)	Isolation min (dB)	VSWR max	IL max (dB)	Isolation min (dB)	VSWR max	IL max (dB)	Isolation min (dB)	VSWR max
MW 124T51	1.2	60	1.8															
MW 124T12				1.3	60	2.0												
MW 124T24							1.5	60	2.0									
MW 124T48									1.8	60	2.0							
MW 124T82												2.4	60	2.0				
MW 124T18															3.0	60	2.0	
MW 124T52	1.2	60	2.0	1.3	60	2.0												
MW 124T08							1.5	60	2.0	1.8	60	2.0						
MW 124T88													2.4	60	2.0	2.0	60	2.0
MW 124T28							1.5	60	2.0	1.8	60	2.0	2.4	60	2.0	3.0	60	2.0

High Frequency Non-Reflective Switches

	Frequency (GHz)																	
	0.5 to 1			1 to 2			2 to 4			4 to 8			8 to 12			12 to 18		
Model Number	IL max (dB)	Isolation min (dB)	VSWR max	IL max (dB)	Isolation min (dB)	VSWR max	IL max (dB)	Isolation min (dB)	VSWR max	IL max (dB)	Isolation min (dB)	VSWR max	IL max (dB)	Isolation min (dB)	VSWR max	IL max (dB)	Isolation min (dB)	VSWR max
MW 124TN51	1.6	60	2.0															
MW 124TN12				1.8	60	2.0												
MW 124TN24							2.0	60	2.0									
MW 124TN48										2.2	60	2.0						
MW 124TN82													2.6	60	2.0			
MW 124TN18																3.2	60	2.0
MW 124TN52	1.6	60	2.0	1.8	60	2.0												
MW 124TN08							2.0	60	2.0	2.2	60	2.0						
MW 124TN88													2.6	60	2.0	3.2	60	2.0
MW 124TN28							2.0	60	2.0	2.2	60	2.6	60	2.0	3.2	2.0	60	2.0

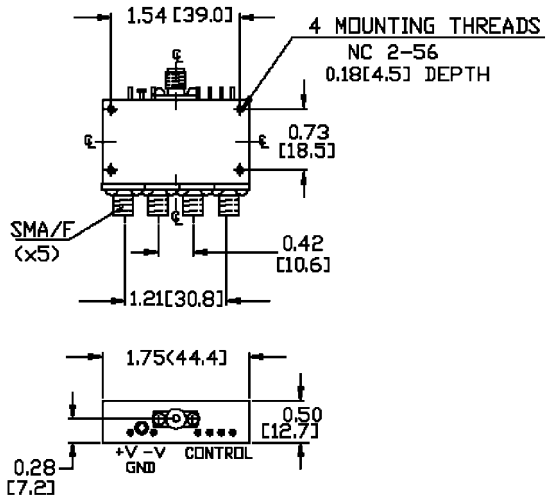
Note: Outline drawings of cases are depicted on pages following these tables. Termination at the Input Port.

Outline Drawings

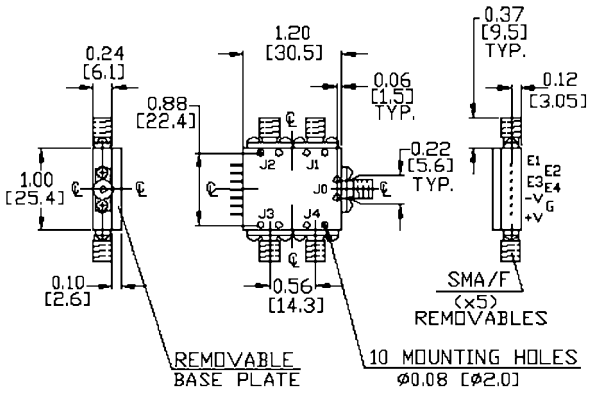
All dimensions are in inches and (mm). Drawings are in first angle projection.

HIGH ISOLATION / HIGH SPEED SWITCHES

CASE Q6

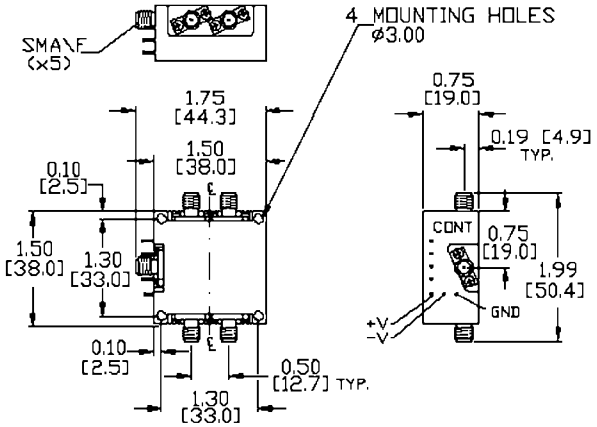


CASE Q7



HIGH ISOLATION / LOW SPEED SWITCHES

CASE Q31



CASE Q5