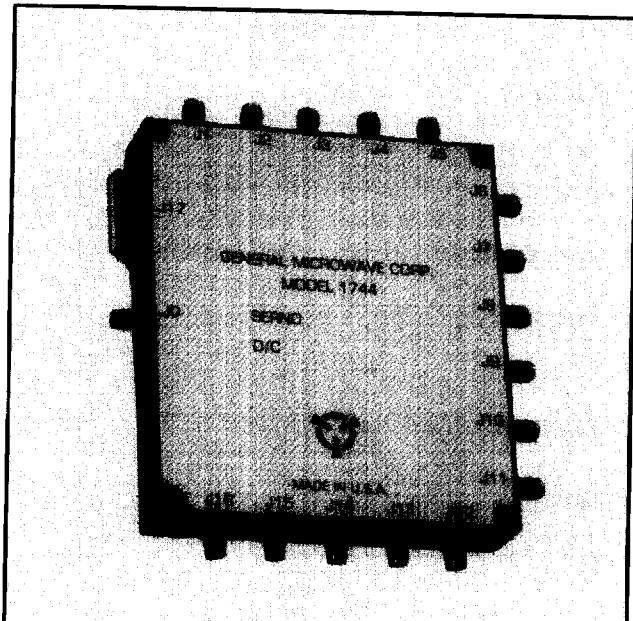


Model 1744

SP16T PIN Diode Switch

General Microwave Corporation's SP16T PIN Diode Switch, Model 1744, covers the 2 to 18 GHz frequency band. The switch exhibits a maximum insertion loss of 6.0 dB and an isolation of 60 dB to 14 GHz and 50 dB to 18 GHz. The switching speed is 500 nsec maximum. This compact unit measures 4.5 x 4.0 x 0.75". Power supply voltages are +5 V and +15 VDC, and it is controlled by 7-bit TTL binary logic. The switch operates over the temperature range of -40°C to +85°C.



**SPECIAL ORDER PRODUCT
-CONSULT FACTORY BEFORE ORDERING-**

- Frequency Range: 2-18 GHz
- Non-reflective
- High Isolation, Low Insertion Loss and VSWR
- Switching Speed: 500 nsec



Model 1744 Specifications

PERFORMANCE CHARACTERISTICS

Frequency	2.0 to 18.0 GHz
Insertion Loss	6.0 dB max
VSWR (on or off)	2.0:1 max
Isolation	60 dB min to 14 GHz, 50 dB min to 18 GHz
Switching Speed	.500 nsec max

Power Handling Capability

Without Performance Degradation

Input to any OFF port	100mW cw or peak
Input to any ON port	.1 W cw or peak
Input to common port	.1 W cw or peak

Survival Power

Input to any OFF port	.1 W average, 10 W peak (1 usec max pulse width)
Input to any ON port	.1 W average, 75 W peak (1 usec max pulse width)
Input to common port	.1 W average, 75 W peak (1 usec max pulse width)

Power Supply	.+5 VDC at 250 mA and .+15 VDC at 100 mA
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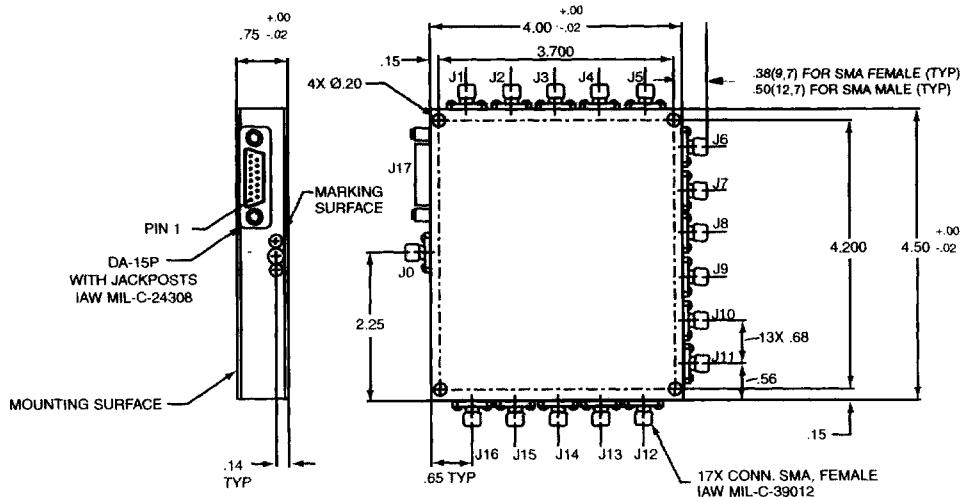
Control Input Impedance	.TTL, two unit load. (A unit load is 0.8 mA sink current and 40 uA source current.)
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Control Logic	.5-bit TTL (Decoded Input)
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Connector	.DA-15P Multipin
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Operating Temperature	.0° to +70° C
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DIMENSIONS AND WEIGHT



J17 PIN FUNCTIONS	
PIN	FUNCTION
1	NOT USED
2	+15V
3	NOT USED
4	NOT USED
5	NOT USED
6	CTL-3 (MSB-2)
7	CTL-5 (MSB)
8	CTL-6 (MSB-1)
9	GND
10	GND
11	CTL-1 (LSB+1)
12	NOT USED
13	CTL-2 (LSB)
14	NOT USED
15	+5V

MODEL 1744
Wt. 15 oz. (426 gm.)

Dimensional Tolerances, unless otherwise indicated: .XX ± .02; .XXX ± .005

