

**DESCRIPTION**

AMC MODEL MSN-7DR/DT-06-MP-IND IS A SINGLE POLE SEVEN THROW, REFLECTIVE OR NON-REFLECTIVE/ABSORPTIVE SWITCH MODULE WITH HIGH ISOLATION, LOW LOSS, HIGH SPEED, AND WITH INTEGRAL TTL DRIVER, DESIGNED FOR BROAD BAND OPERATIONS.

**SPECIFICATIONS:**

- FREQUENCY: 0.5 GHz TO 18 GHz
- INSERTION LOSS: REFLECTIVE: 3.75db  
ABSORPTIVE: 4.25db
- ISOLATION: 0.5 GHz TO 2 GHz: 60db  
2 GHz TO 18 GHz: 70db
- VSWR: REFLECTIVE IN/OUT: 2.0:1  
ABSORPTIVE IN/OUT: 2.0:1  
ABSORPTIVE OUT/OFF: 2.0:1
- SPEED: RISE: 10ns TYPICAL, 15ns MAX.  
FALL: 10ns TYPICAL, 15ns MAX.  
DELAY ON: 75ns TYPICAL, 100ns MAX.  
DELAY OFF: 75ns TYPICAL, 100ns MAX.
- POWER INPUT: (CW)+20dBm (STANDARD), +10 dBm (HIGH SPEED)
- SURVIVAL POWER: 1 WATT CW, 10 WATTS PEAK 1 usec
- CONTROL: TTL LOGIC "0"=ON "1"=OFF
- POWER SUPPLY: +5V @ 350 mA MAX.  
-5V @ 75mA MAX.(RELECTIVE)  
100mA MAX.(ABSORPTIVE/NON-REFLECTIVE)

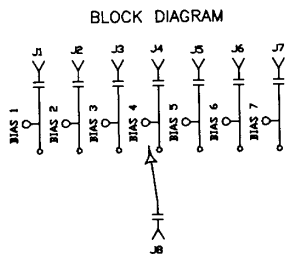
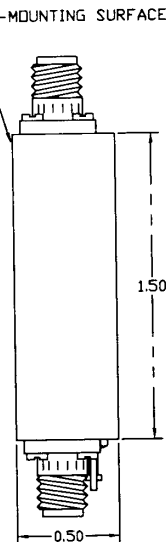
**OPTIONS:**

- INDEPENDENT CONTROL WITH SOLDER PIN STANDARD
- DEC-MP: 3 BIT DECODER WITH MULTIPIN
- DEC-SP: 3 BIT DECODER WITH SOLDER PIN
- MP-IND: INDEPENDENT CONTROL WITH MULTIPIN
- 10M18: 10 MHz TO 18 GHz (INSERTION LOSS INCREASES BY 1.5db AT 10 MHz AND 0.5db AT 18 GHz)
- 100M18: 100 MHz TO 18 GHz (INSERTION LOSS INCREASES BY 1.5db AT 100 MHz AND 0.5db AT 18 GHz)
- 118: 1 GHz TO 18 GHz (NO CHANGE IN INSERTION LOSS)
- 218: 2 GHz TO 18 GHz (NO CHANGE IN INSERTION LOSS)
- 412: 4 GHz TO 12.4 GHz (NO CHANGE IN INSERTION LOSS)
- 618: 6 GHz TO 18 GHz (NO CHANGE IN INSERTION LOSS)
- 1218: 12 GHz TO 18 GHz (NO CHANGE IN INSERTION LOSS)
- 100M20: 100 MHz TO 20 GHz (INSERTION LOSS INCREASES BY 1.5db AT 100 MHz AND 1.0db AT 20 GHz)
- 220: 2 GHz TO 20 GHz (INSERTION LOSS INCREASES BY 1.0db AT 20 GHz)
- 1020: 10 GHz TO 20 GHz (INSERTION LOSS INCREASES BY 1.0db AT 20 GHz)
- B01: -12V POWER SUPPLIES
- B02: -15V POWER SUPPLIES
- B03: REVERSE LOGIC "1"=ON "0"=OFF
- B04: DRIVERLESS, CURRENT CONTROLLED
- B05: HIGH SPEED, TURNON/TURNOFF 25 nsec MAXIMUM WHEN APPLICABLE
- B06: HIGH POWER - SPECIFY CW POWER, PEAK POWER, PULSE WIDTH, DUTY CYCLE, RF FREQUENCY AND BANDWIDTH
- B07: CUSTOM DESIGNED PRODUCT- SPECIFY INITIALS OF CUSTOMER
- B08: LOW VIDEO TRANSIENTS - SPECIFY VIDEO BANDWIDTH
- B09: LOW INSERTION LOSS VERSION
- B10: HIGHER ISOLATION VERSION

**ENVIRONMENTAL RATINGS:**

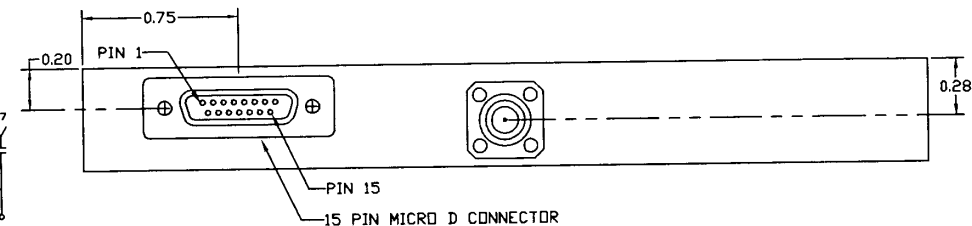
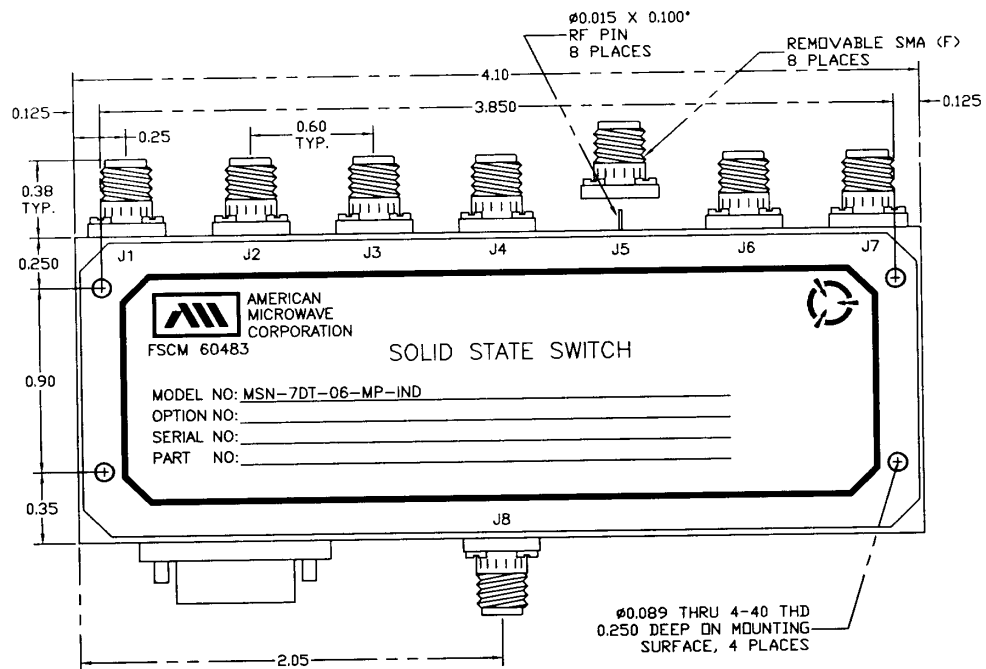
- TEMPERATURE: -55°C TO +85°C (OPERATING)  
-65°C TO +125°C (STORAGE)
- HUMIDITY: MIL-STD-202F, METHOD 103B COND. B
- SHOCK: MIL-STD-202F, METHOD 213B COND. B
- VIBRATION: MIL-STD-202F, METHOD 204D COND. B
- ALTITUDE: MIL-STD-202F, METHOD 105C COND. B
- TEMPERATURE CYCLE: MIL-STD-202F, METHOD 107D COND. A

ALL DIMENSIONS ARE IN INCHES  
TOLERANCES:  
X.XX ±0.020  
X.XXX ±0.010



PIN OUT TABLE	
PIN NO.	FUNCTION
1	E1
2	E2
3	E3
4	E4
5	E5
6	E6
7	E7
8	N/C
9	N/C
10	N/C
11	N/C
12	GND
13	+V
14	-V
15	GND

REVISIONS			DATE	APPROVED
ZONE	REV.	DESCRIPTION	8/11/00	
	-	ORIGINAL RELEASE		



NOTE:  
DR=WITH DRIVER, REFLECTIVE  
DT=WITH DRIVER, NON-REFLECTIVE/ABSORPTIVE

**CONFIDENTIAL AND PROPRIETARY**

PART NO.		AMERICAN MICROWAVE CORPORATION FREDERICK, MARYLAND	
APPROVALS		DATE	
DRAWN <i>WSP &amp; RRA</i>		8/11/00	
CHECKED		TITLE PRODUCT FEATURE MSN-7DR/DT-06-MP-IND REFLECTIVE OR NON-REFLECTIVE/ABSORPTIVE SOLID STATE SWITCH	
ISSUED		SIZE A	FSCM NO. 60483
		DWG NO. 100-5424-4	REV. -
SCALE N/S		SHEET 1 of 3	

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION