

DESCRIPTION:

AMC MODEL MSN-10DR/DT-05-MP-IND IS A SINGLE POLE TEN THROW, REFLECTIVE OR ABSORPTIVE/NON-REFLECTIVE SWITCH MODULE WITH LOW INSERTION LOSS, HIGH ISOLATION AND INTEGRAL TTL DRIVER, DESIGNED FOR 500 MHz TO 18 GHz FREQUENCY RANGE.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	ORIGINAL RELEASE	7/7/89	

SPECIFICATIONS:

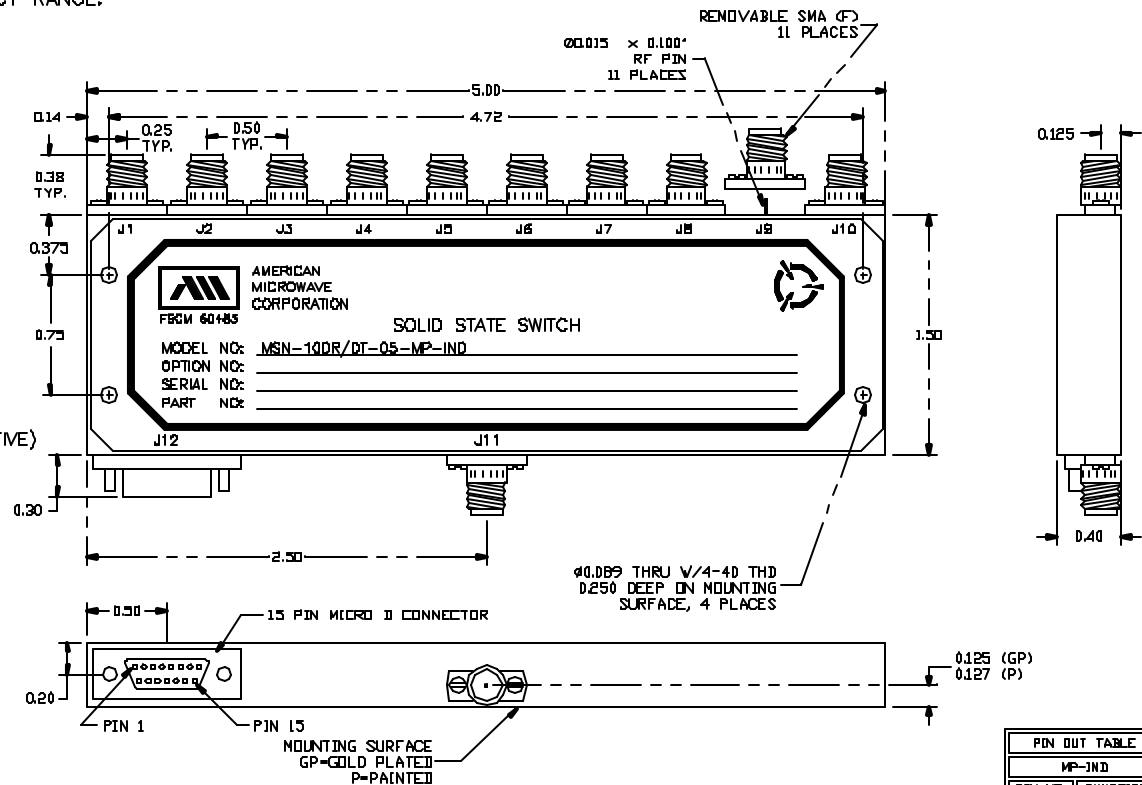
- **FREQUENCY:** 0.5 GHz TO 18 GHz
- **INSERTION LOSS:** REFLECTIVE: 4.5db
..... ABSORPTIVE: 5.0db
- **ISOLATION:** 0.5 GHz TO 2 GHz: 60dB
..... 2 GHz TO 18 GHz: 70dB
- **VSWR:** REFLECTIVE IN/OUT: 2.0:1
..... ABSORPTIVE IN/OUT: 2.0:1
..... ABSORPTIVE OUT/OFF: 2.0:1
- **SPEED:** RISE: 10ns TYPICAL, 15ns MAXIMUM
..... FALL: 10ns TYPICAL, 15ns MAXIMUM
..... DELAY ON: 75ns TYPICAL, 100ns MAXIMUM
..... DELAY OFF: 75ns TYPICAL, 100ns MAXIMUM
- **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 @ 500 mA MAXIMUM
..... -5V @ 75 mA MAXIMUM (REFLECTIVE)
..... 100 mA MAXIMUM (ABSORPTIVE/NON-REFLECTIVE)
- **SIZE:** 5.00" x 1.50" x 0.40"
- **WEIGHT:** 5.50 OUNCES

OPTIONS:

- INDEPENDENT CONTROL WITH SOLDER PIN STANDARD
- DEC-MP 4 BIT DECODER WITH MULTIPIN
- DEC-SP 4 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)
- 818 8 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 20 nsec MAXIMUM WHEN APPLICABLE OR OPTION HS
- 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



NOTE:

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

PIN OUT TABLE	
MP-IND	
PIN NO.	FUNCTION
1	E1
2	E2
3	E3
4	E4
5	E5
6	E6
7	E7
8	E8
9	E9
10	E10
11	N/C
12	GND
13	+V
14	-V
15	GND

N/C = NOT CONNECTED

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

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

PART NO.		AMERICAN MICROWAVE CORPORATION FREDERICK, MARYLAND	
APPROVALS	DATE	TITLE OUTLINE DRAWING MSN-10DR/DT-05-MP-IND REFLECTIVE OR NON-REFLECTIVE/ABSORPTIVE SOLID STATE SWITCH	
DRAWN <i>WSP</i>	7/7/89	SIZE A	FRGM NO. 60483
CHECKED		DWG NO. 100-4107-4	REV. -
ISSUED		SCALE	SHEET 1 of 1