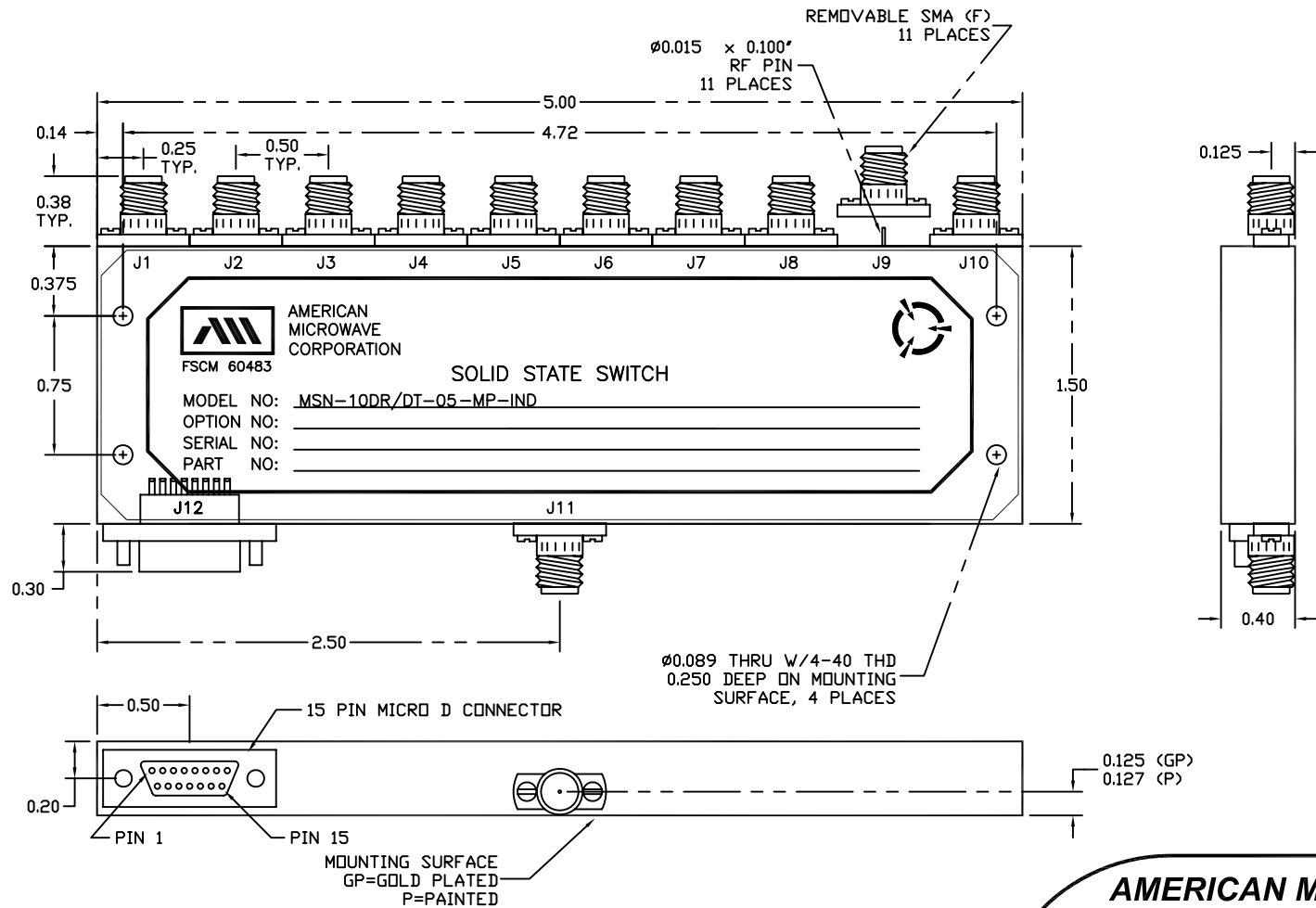


**DESCRIPTION:**

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				
ECR	REV.	DESCRIPTION	DATE	APPROVED
	-	ORIGINAL RELEASE	07/07/99	
07-076	A	INSERTION LOSS TO 7.0DB	05/17/07	YR

**MECHANICAL OUTLINE**



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

**AMERICAN MICROWAVE CORPORATION**

7311-G GROVE ROAD  
FREDERICK, MARYLAND 21704 USA  
TEL: 301-662-4700 FAX: 301-662-4938  
WEBSITE: [www.americanmicrowavecorp.com](http://www.americanmicrowavecorp.com)  
E-MAIL: [sales@americanmicrowavecorp.com](mailto:sales@americanmicrowavecorp.com)  
ISO 9001:2000 CERTIFIED



APPROVALS		DATE	TITLE		
DRAWN <i>PRB</i>		05/17/07	MECHANICAL OUTLINE MSN-10DR/DT-05-MP-IND REFLECTIVE OR NON-REFLECTIVE/ABSORPTIVE SOLID STATE SWITCH		
CHECKED <i>YR</i>		05/22/07	SIZE	FSCM NO.	DWG NO.
ISSUED			A	60483	100-4107-004
			SCALE	N:S	SHEET 2 OF 4
			REV.	A	

**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.

**SPECIFICATIONS:**

- FREQUENCY: 0.5 GHz TO 18 GHz
- INSERTION LOSS: REFLECTIVE: 4.5db  
ABSORPTIVE: 7.0db
- 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 (RELECTIVE)  
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)
- 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 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

NOTE:

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

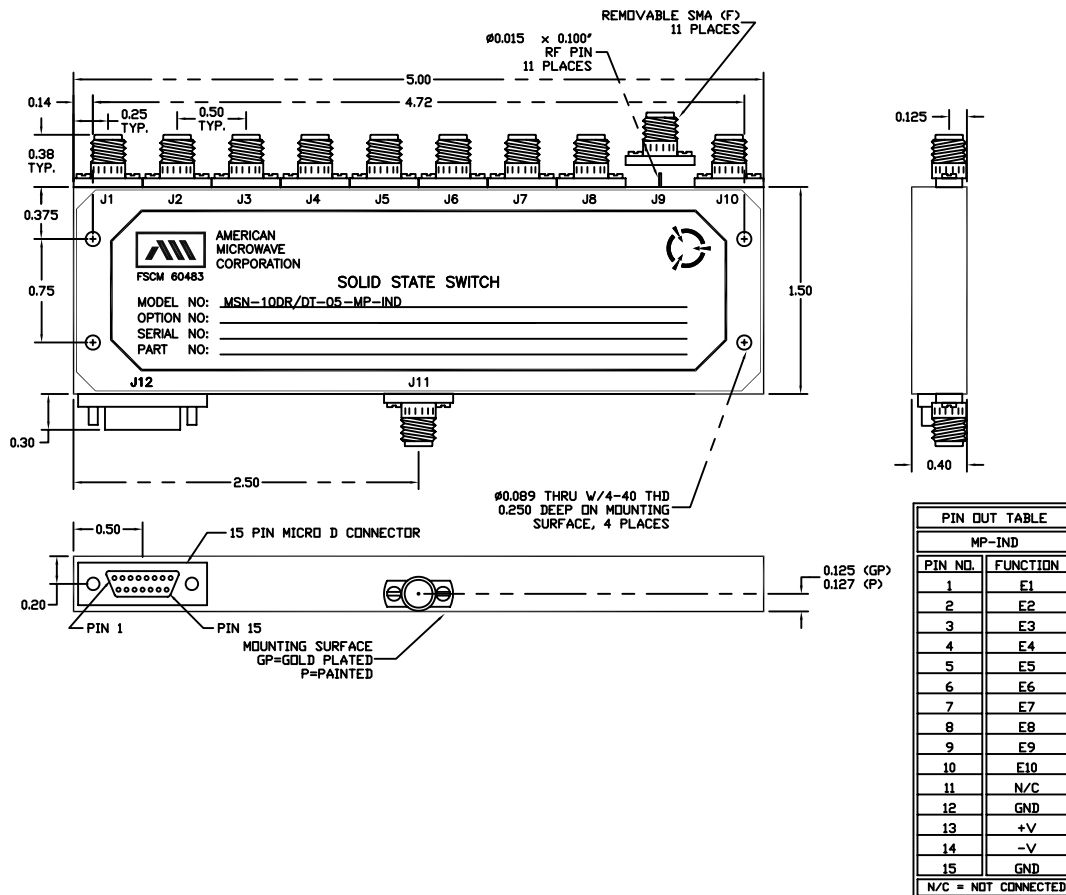
ALL DIMENSIONS ARE IN INCHES  
TOLERANCES:

X.XX ±0.020  
X.XXX ±0.010

**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

REVISIONS				
ECR	REV.	DESCRIPTION	DATE	APPROVED
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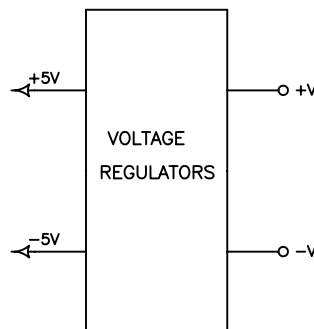
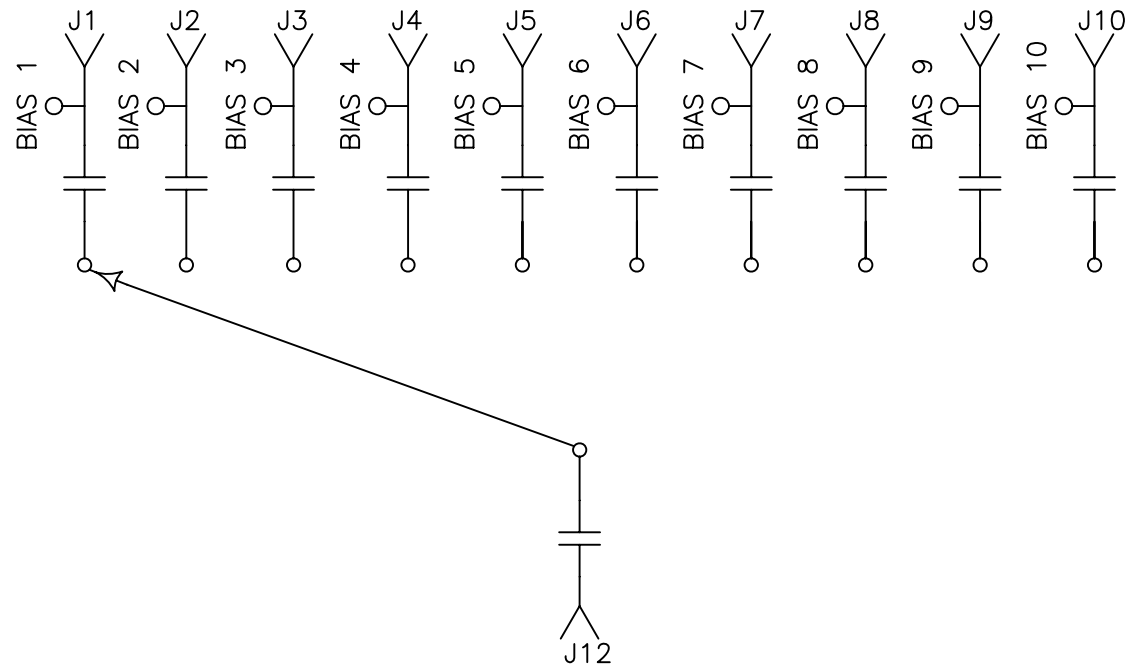
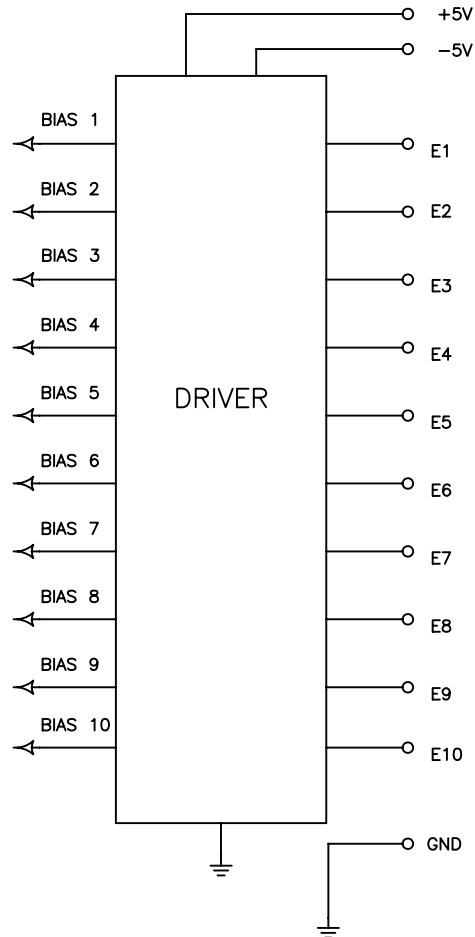
APPROVALS		DATE	TITLE		
DRAWN <i>PRB</i>		05/17/07	PRODUCT FEATURE MSN-10DR/DT-05-MP-IND REFLECTIVE OR NON-REFLECTIVE/ABSORPTIVE SOLID STATE SWITCH		
CHECKED <i>YR</i>		05/22/07	SIZE	FSCM NO.	DWG NO.
			A	60483	100-4107-004
					REV. A

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**FUNCTIONAL BLOCK DIAGRAM**



**CONFIDENTIAL AND PROPRIETARY**

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APPROVALS		DATE	TITLE		
DRAWN	<i>PRB</i>	05/17/07	FUNCTIONAL BLOCK DIAGRAM MSN-10DR/DT-05-MP-IND REFLECTIVE OR NON-REFLECTIVE/ABSORPTIVE SOLID STATE SWITCH		
CHECKED	<i>YR</i>	05/22/07	SIZE	FSCM NO.	DWG NO.
ISSUED			A	60483	100-4107-004
			SCALE	N:S	SHEET 3 OF 4