

**DESCRIPTION:**

AMC MODEL MSN-2DT-05-LVT-HERM OPTION 100M18 IS A SINGLE POLE TWO THROW, REFLECTIVE SWITCH MODULE WITH VERY LOW INSERTION LOSS, HIGH ISOLATION AND WITH INTEGRAL TTL DRIVER, DESIGNED FOR LOW VIDEO TRANSIENTS, LOW HARMONIC DISTORTION AND BROAD BAND OPERATIONS.

**SPECIFICATIONS:**

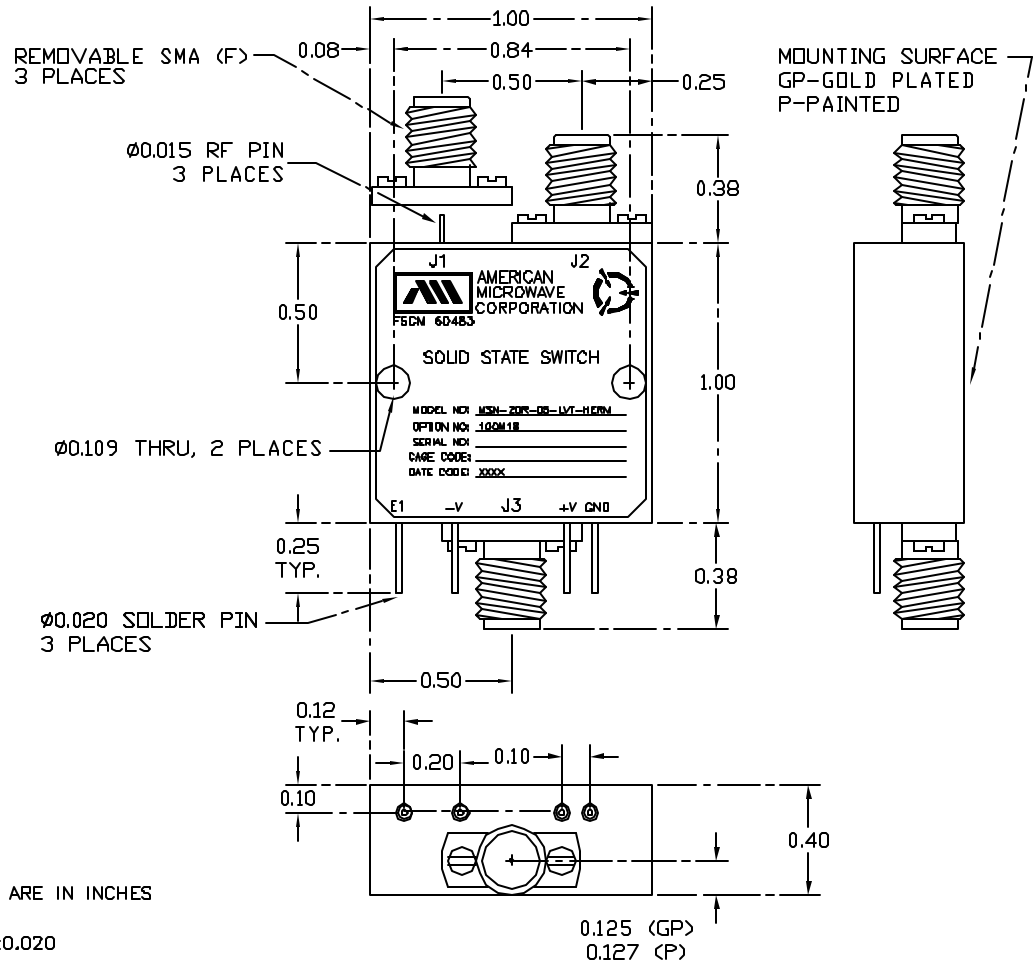
- FREQUENCY: .....100 MHz TO 18 GHz
- INSERTION LOSS: .....100 MHz 2 GHz 1.0 dB MAXIMUM OVER TEMPERATURE  
2 TO 6 GHz 1.5 dB MAXIMUM OVER TEMPERATURE  
6 TO 18 GHz 3.0 dB MAXIMUM OVER TEMPERATURE
- ISOLATION (ANY PORT): .....7dB MINIMUM
- VSWR (ANY PORT, ANY STATE): .....2.0:1
- SWITCHING SPEED: .....100 nS MAXIMUM 90 nS TYPICAL  
{50% TTL TO 10%/90% RF}
- RISE/FALL TIME: .....15 nS MAXIMUM 10 nS TYPICAL  
{10% TO 90% RF}  
{90% TO 10% RF}
- RF INPUT POWER: .....+20 dBm OPERATING, 1 WATT SURVIVAL
- RF CONNECTORS: .....SMA FEMALE
- DC POWER SUPPLY: .....+5V ±10% @ 60 mA MAXIMUM  
-5V ±10% @ 50 mA MAXIMUM
- CONTROL: .....TTL LOGIC "0"=ON J3-J1 "1"=ON J3-J2
- CONTROL INTERFACE: .....DC SOLDER PINS
- VIDEO TRANSIENTS: .....±0.75 VOLTS PEAK TO PEAK, 20 MHz BANDWIDTH
- WEIGHT: .....1.5 OUNCES TYPICAL
- SIZE: .....1.00 (L) X 1.00 (W) X 0.40 (H)

**ENVIRONMENTAL RATINGS:**

- TEMPERATURE: .....-54°C TO +85°C (OPERATING)  
-54°C TO +85°C (STORAGE)
- HUMIDITY: .....100% OVER TEMPERATURE
- SHOCK: .....18 IMPACT SHOCKS OF 20 Gs, CONSISTING OF 3 SHOCKS IN OPPOSITE DIRECTIONS ALONG EACH OF THREE MUTUALLY PERPENDICULAR AXES, EACH SHOCK IMPULSE HAVING A TIME DURATION OF 11 ±1 MILLISECONDS. THE "G" VALUE SHALL BE WITHIN ± 10% WHEN MEASURED WITH A 0.2 TO 250 Hz FILTER, AND THE MAXIMUM "G" SHALL OCCUR AT APPROXIMATELY
- VIBRATION: .....MIL-STD-B10, METHOD 514.4, 5 HOURS EACH OF THREE AXES
- ALTITUDE: .....MIL-STD-202F, METHOD 105C COND. B
- TEMPERATURE CYCLE: .....MIL-STD-202F, METHOD 107D COND. A

NOTE THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
-	-	ORIGINAL JOB # 605082PE-1	6/22/06	



ALL DIMENSIONS ARE IN INCHES

TOLERANCES:

- X.XX ±0.020
- X.XXX ±0.010

M/N = MANUFACTURER PART NUMBER  
O/N = OPTION NUMBER  
S/N = SERIAL NUMBER

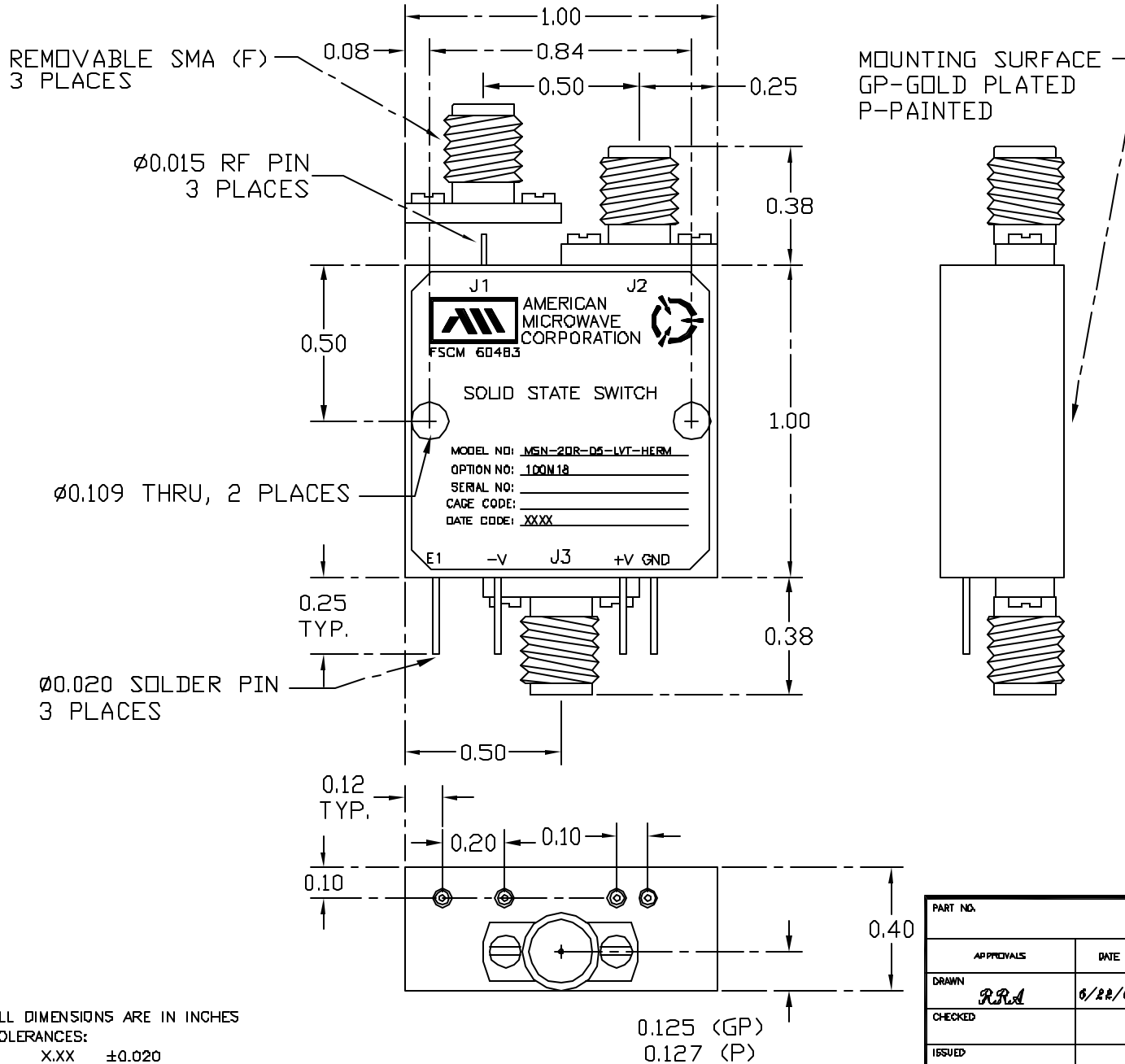
NOTE:  
DT=WITH DRIVER, NON-REFLECTIVE/ABSORPTIVE

PART NO.		AMERICAN MICROWAVE CORPORATION FREDERICK, MARYLAND			
APPROVALS	DATE	TITLE			
DRAWN <i>RRD</i>	6/22/06	PRODUCT FEATURE MSN-2DR-05-LVT-HERM OPTION 100M18 SOLID STATE SWITCH			
CHECKED		SIZE	FSCM NO.	DWG NO.	REV.
ISSUED		A	60483	100-3922-11	-
		SCALE			SHEET 1 of 4

**DESCRIPTION:**

AMC MODEL MSN-2DT-05-LVT-HERM OPTION 100M1B IS A SINGLE POLE TWO THROW, REFLECTIVE SWITCH MODULE WITH VERY LOW INSERTION LOSS, HIGH ISOLATION AND WITH INTEGRAL TTL DRIVER, DESIGNED FOR LOW VIDEO TRANSIENTS, LOW HARMONIC DISTORTION AND BROAD BAND OPERATIONS.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
-	-	ORIGINAL JOB # 6050B2PE-1	6/22/06	



ALL DIMENSIONS ARE IN INCHES

TOLERANCES:

X.XX ±0.020

X.XXX ±0.010

0.125 (GP)

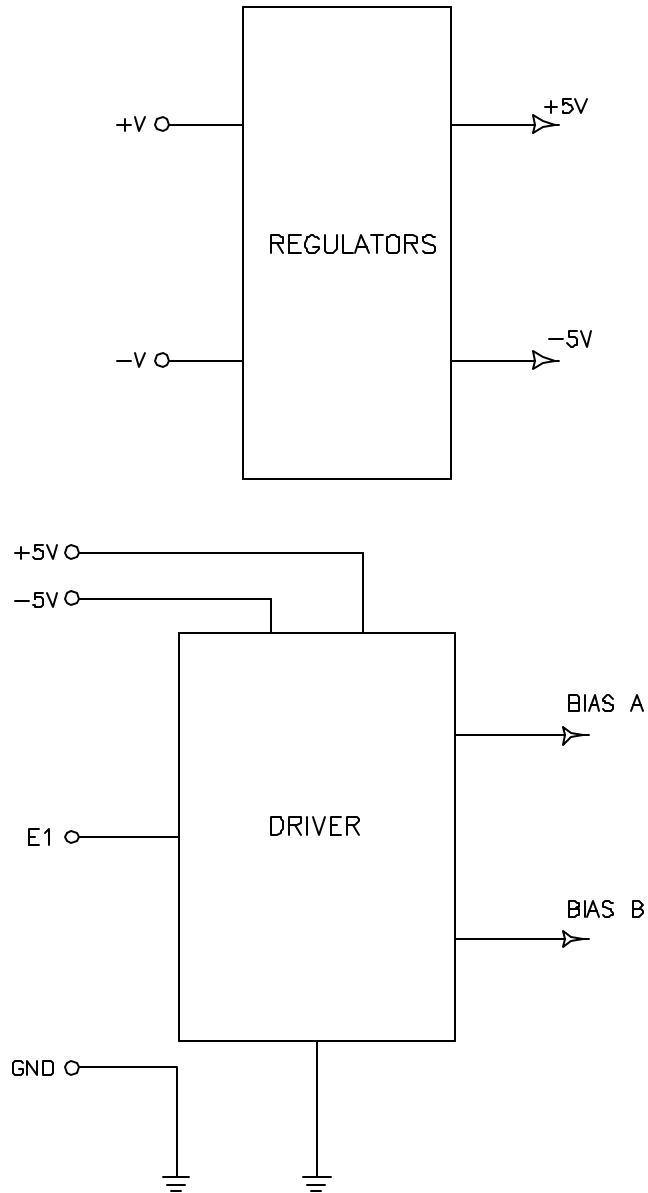
0.127 (P)

PART NO.		AMERICAN MICROWAVE CORPORATION FREDERICK, MARYLAND	
APPROVALS	DATE	TITLE	
DRAWN <i>RRD</i>	6/22/07	MECHANICAL OUTLINE MSN-2DR-05-STANDARD OPTION 100M1B SOLID STATE SWITCH	
CHECKED		SIZE	REV.
ISSUED		A	-
		FSCM NO. 60483	DWG NO. 100-3922-11
SCALE		SHEET 2 of 4	

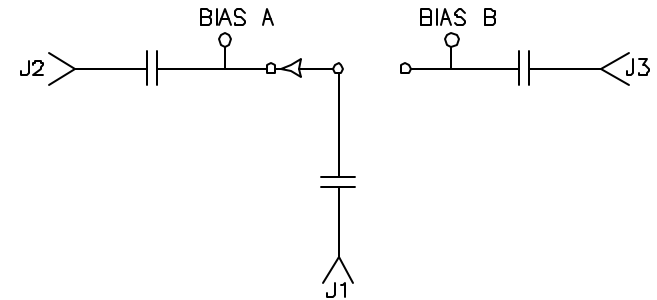
**DESCRIPTION:**

AMC MODEL MSN-2DT-05-LVT-HERM OPTION 100M1B IS A SINGLE POLE TWO THROW, REFLECTIVE SWITCH MODULE WITH VERY LOW INSERTION LOSS, HIGH ISOLATION AND WITH INTEGRAL TTL DRIVER, DESIGNED FOR LOW VIDEO TRANSIENTS, LOW HARMONIC DISTORTION AND BROAD BAND OPERATIONS.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	ORIGINAL JOB # 6050B2PE-1	6/22/06	



**BLOCK DIAGRAM**




ALL DIMENSIONS ARE IN INCHES

TOLERANCES:

X.XX ±0.020

X.XXX ±0.010

PART NO.		 AMERICAN MICROWAVE CORPORATION FREDERICK, MARYLAND	
APPROVALS	DATE	TITLE	
DRAWN <i>RRD</i>	6/22/07	BLOCK DIAGRAM MSN-2DR-05-STANDARD OPTION 100M1B SOLID STATE SWITCH	
CHECKED		SIZE	REV.
ISSUED		A 60483	100-3922-11 -
		SCALE	SHEET 3 of 4