

## DESCRIPTION

AMC MODEL MSN-3DR-05-DEC-SP OPTION: 303F, HITECH IS A REFLECTIVE SINGLE POLE THREE THROW SWITCH MODULE DESIGNED TO OPERATE BETWEEN THE 3.1 TO 3.5 GHz FREQUENCY RANGE.

## SPECIFICATIONS

- FREQUENCY RANGE: ..... 3.1 TO 3.5 GHz
- INSERTION LOSS: .....  $1.3 \pm 0.4$  dB MAXIMUM
- FLATNESS: .....  $\pm 0.25$  dB
- ISOLATION: ..... 80 dB MINIMUM
- VSWR: ..... 1.4:1
- DELAY ON: ..... 500 nSec MAXIMUM
- DELAY OFF: ..... 500 nSec MAXIMUM
- POWER INPUT: ..... (CW)+20 dBm (STANDARD), +10 dBm (HIGH SPEED)
- SURVIVAL POWER: ..... 1 WATT CW, 10 WATTS PEAK 1  $\mu$ Sec
- CONTROL: ..... SEE TRUTH TABLE
- POWER SUPPLY: ..... +5V @ 150 mA MAXIMUM  
-5V @ 75 mA MAXIMUM
- CONNECTORS:
  - RF: ..... SMA FEMALE
  - CONTROL: ..... SOLDER PIN
- SIZE: ..... 1.10" (L) x 1.10" (W) x 0.40" (H)
- WEIGHT: ..... 1.5 OUNCE TYPICAL

## OPTIONS:

- 303F: ..... 3.1 TO 3.5 GHz FREQUENCY RANGE
- HITECH: ..... SPECIAL MECHANICAL HOUSING

TRUTH TABLE					
CONTROL			RF		
E3	E5	E6	J1-J4	J2-J4	J3-J4
0	1	1	IL	ISO	ISO
1	0	1	ISO	IL	ISO
1	1	0	ISO	ISO	IL

PIN	CONNECTION
J1	RF
J2	RF
J3	RF
J4	RF COMMON
E1	+5V
E2	-5V
E3	J1 CONTROL
E4	GND
E5	J2 CONTROL
E6	J3 CONTROL

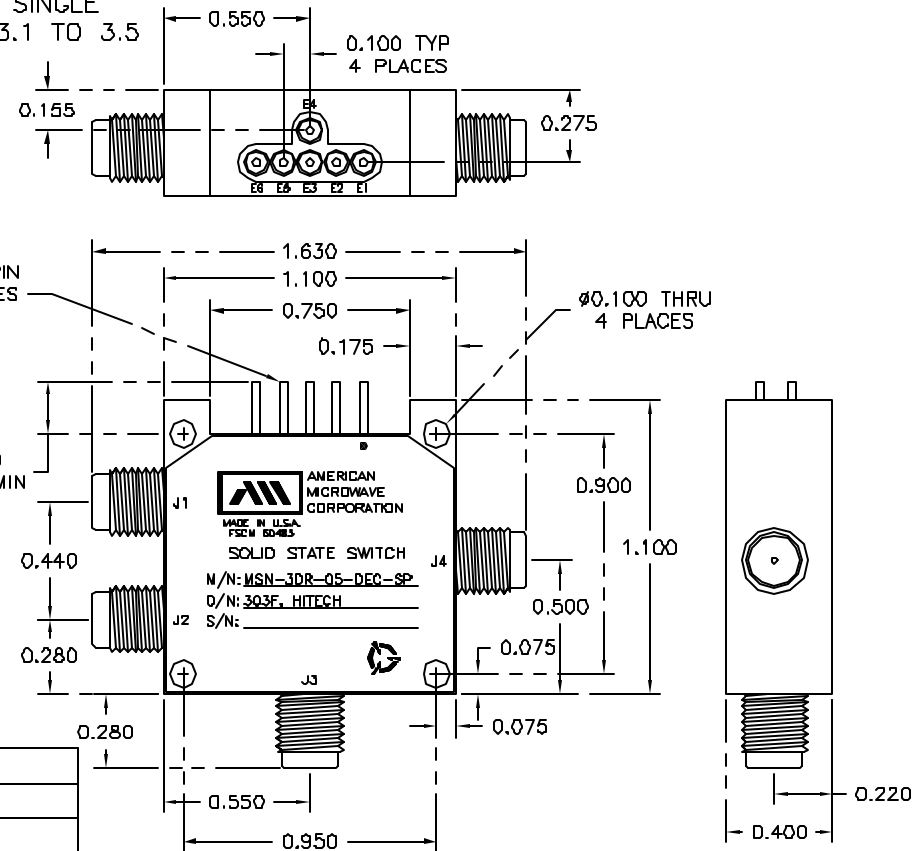
## ENVIRONMENTAL RATINGS:

- TEMPERATURE: ..... 0°C TO +50°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: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE  
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ALL DIMENSIONS ARE IN INCHES  
TOLERANCES:  
XXX  $\pm 0.020$   
XXX  $\pm 0.010$

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
-	-	ORIGINAL RELEASE JOB# 505137XPE-2	9/29/05	



## 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

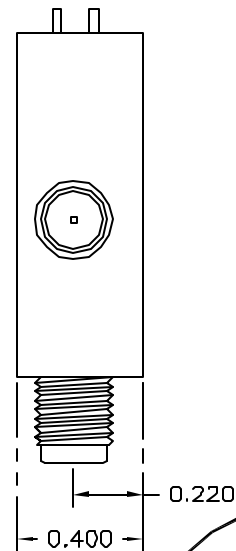
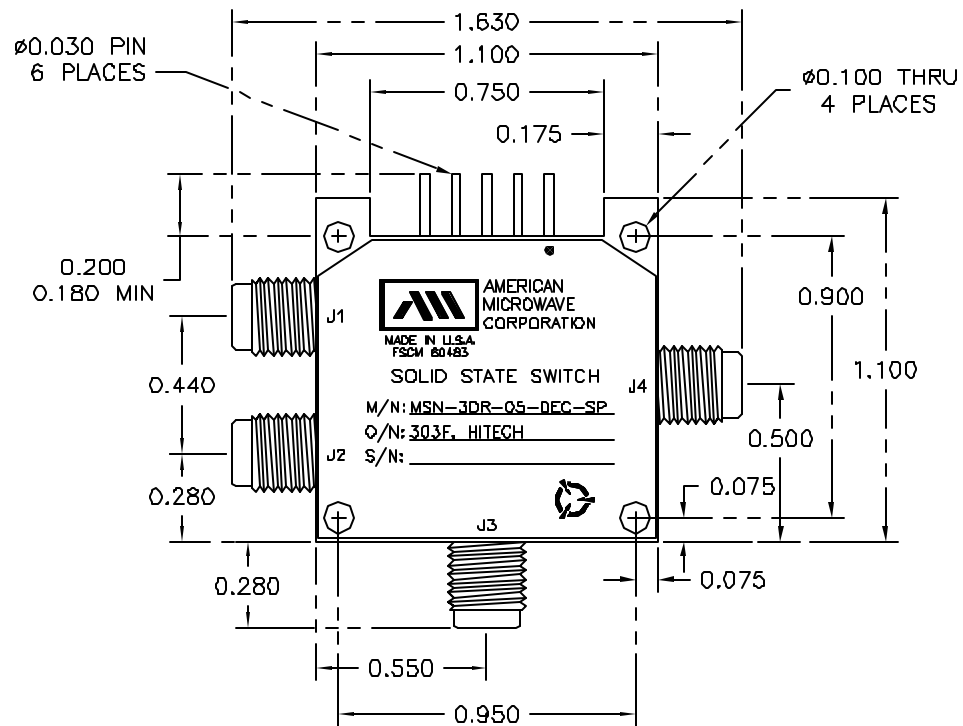
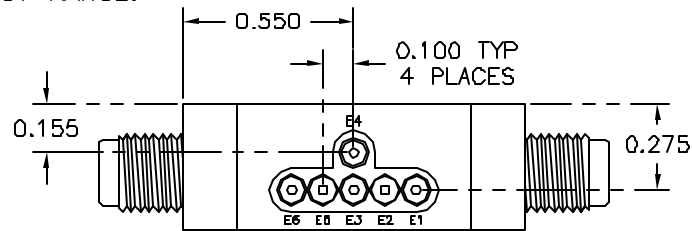


APPROVALS		DATE	TITLE		REV.
DRAWN	<i>FDJ</i>	9/29/05	PRODUCT FEATURE MSN-3DR-05-DEC-SP OPTION: 303F, HITECH 3.1-3.5 GHz, SINGLE POLE THREE THROW SWITCH		-
CHECKED			SIZE	FSCM NO.	DWG NO.
ISSUED			A	60483	100-7507
			SCALE	N:S	SHEET 1 OF 4

## DESCRIPTION

AMC MODEL MSN-3DR-05-DEC-SP OPTION: 303F, HITECH IS A REFLECTIVE SINGLE POLE THREE THROW SWITCH MODULE DESIGNED TO OPERATE BETWEEN THE 3.1 TO 3.5 GHz FREQUENCY RANGE.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	ORIGINAL RELEASE JOB# 505137XPE-2	9/29/05	



## MECHANICAL OUTLINE

PIN	CONNECTION
J1	RF
J2	RF
J3	RF
J4	RF COMMON
E1	+5V
E2	-5V
E3	J1 CONTROL
E4	GND
E5	J2 CONTROL
E6	J3 CONTROL

## 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



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

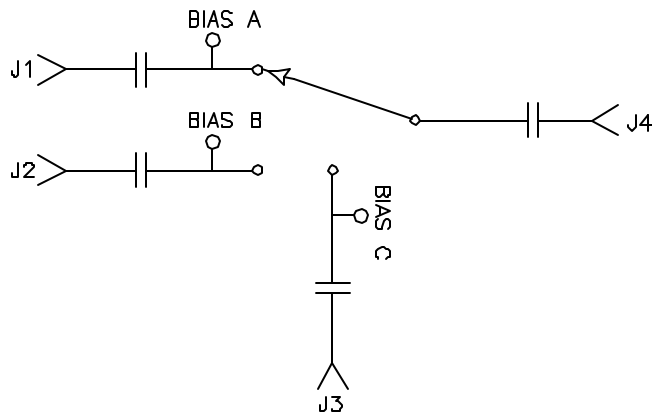
APPROVALS		DATE	TITLE		
DRAWN	<i>FDS</i>	9/29/05	MECHANICAL OUTLINE MSN-3DR-05-DEC-SP OPTION: 303F, HITECH 3.1-3.5 GHz, SINGLE POLE THREE THROW SWITCH		
CHECKED			SIZE	FSCM NO.	DWG NO.
ISSUED			A	60483	100-7507
			SCALE	N:S	SHEET 2 OF 4

**DESCRIPTION**

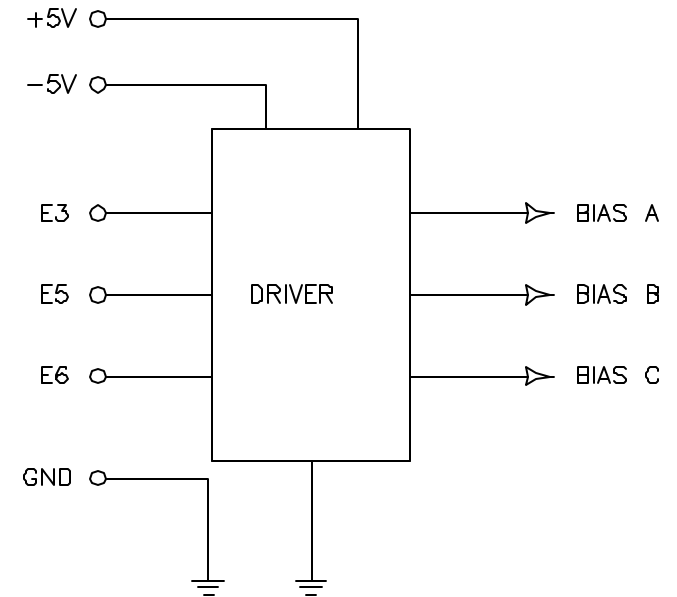
AMC MODEL MSN-3DR-05-DEC-SP OPTION: 303F, HITECH IS A REFLECTIVE SINGLE POLE THREE THROW SWITCH MODULE DESIGNED TO OPERATE BETWEEN THE 3.1 TO 3.5 GHz FREQUENCY RANGE.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	ORIGINAL RELEASE JOB# 505137XPE-2	9/29/05	

BLOCK DIAGRAM



**FUNCTIONAL BLOCK DIAGRAM**



**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		9/29/05	FUNCTIONAL BLOCK DIAGRAM	
CHECKED			MSN-3DR-05-DEC-SP	
ISSUED			OPTION: 303F, HITECH	
SIZE	FSCHM NO.	DWG NO.	3.1-3.5 GHz, SINGLE POLE THREE THROW SWITCH	
A	60483	100-7507		
SCALE	N:S	SHEET	3 OF 4	