DESCRIPTION

AMC MODEL SWN-1140-3DR/DT-DEC-SP IS A SINGLE POLE THREE THROW, REFLECTIVE OR NON-REFLECTIVE/ABSORPTIVE SWITCH MODULE WITH LOW INSERTION LOSS, HIGH SPEED AND WITH INTEGRAL TTL DRIVER, DESIGNED FOR BROAD BAND OPERATIONS.

SPECIFICATIONS:

- FREQUENCY: 0.5 GHz TO 18 GHz
- INSERTION LOSS: REFLECTIVE: 2.75db
ABSORPTIVE: 3.75db
- 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 @ 150 mA MAX.
−5V @ 75mA MAX.(RELECTIVE)
100mA MAX.(ABSORPTIVE/NON-REFLECTIVE)
- SIZE 1.25" (L) x 1.25" (W) x 0.40" (H)
- WEIGHT 2.0 oz.

OPTIONS:

	INDEPENDENT CONTROL WITH SOLDER PIN STANDARD
DEC-SP	2 BIT DECODER WITH SOLDER PIN
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 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
B11	0.70" THICK VERSION
B12	0.88" THICK VERSION

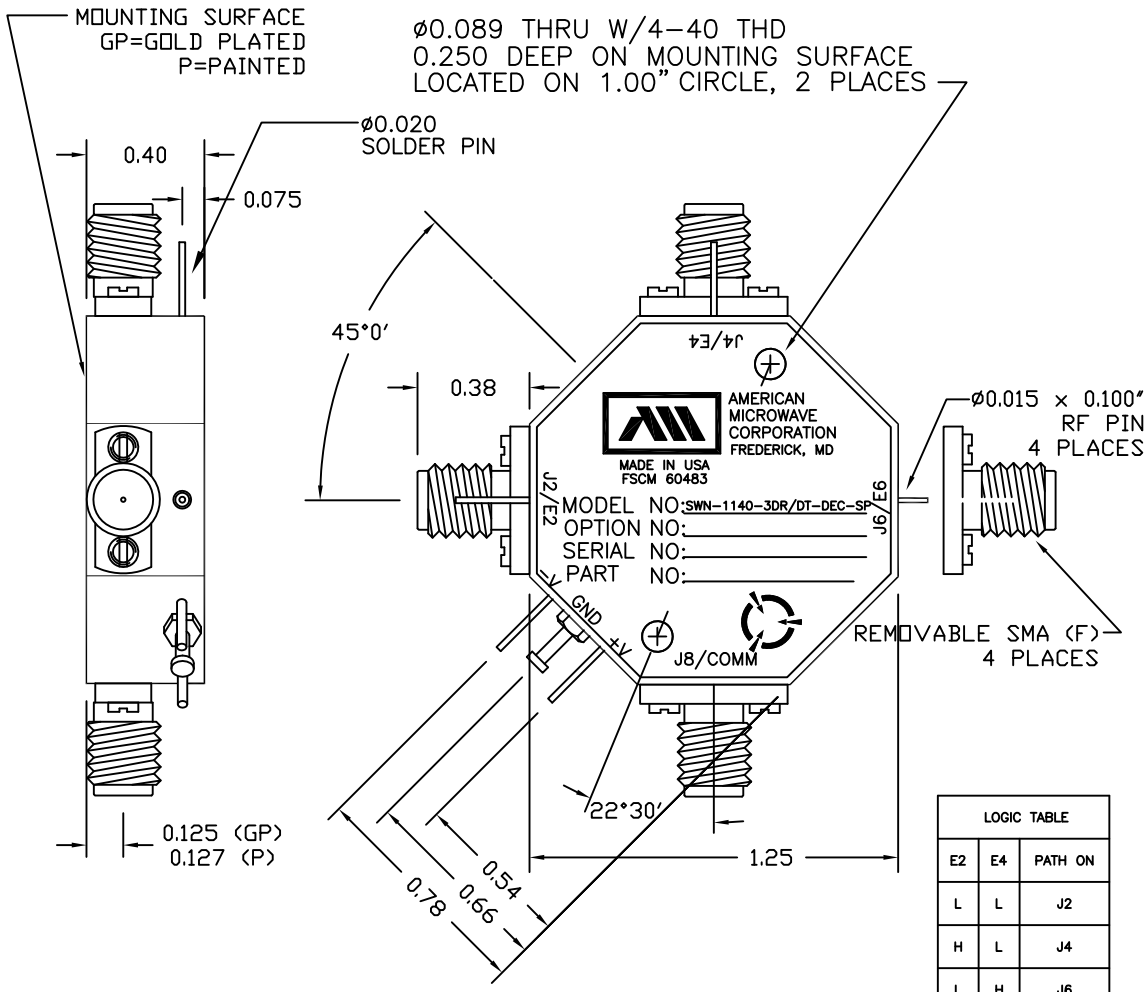
ENVIRONMENTAL RATINGS:

- 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: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

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

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	−	ORIGINAL RELEASE	8/27/99	



LOGIC TABLE		
E2	E4	PATH ON
L	L	J2
H	L	J4
L	H	J6

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

CONTRACT NO.		AMERICAN MICROWAVE CORPORATION FREDERICK, MARYLAND	
APPROVALS	DATE	TITLE	OUTLINE DRAWING SWN-1140-3DR/DT-DEC-SP REFLECTIVE OR NON-REFLECTIVE/ABSORPTIVE RADIAL SOLID STATE SWITCH
DRAWN WSP, RRA	8/27/99		
CHECKED			
ISSUED		SIZE A / FSCM NO. 60483 / DWG NO. 100-4164-2 / REV. −	
		SCALE N/S	SHEET 1 of 2