

DESCRIPTION:

AMC MODEL SWG-2DR/DT-SIS IS A SINGLE POLE TWO THROW REFLECTIVE OR ABSORPTIVE/ NON-REFLECTIVE SWITCH MODULE WITH VERY LOW INSERTION LOSS, 2 POSITIVE SUPPLIES, AND WITH INTEGRAL TTL DRIVER, DESIGNED FOR BROAD BAND OPERATIONS.

SPECIFICATIONS:

- **FREQUENCY:** 0.5 GHz TO 18 GHz
- **INSERTION LOSS:** 0.5-2 GHz 1.2dB
 (ABSORPTIVE ADD 2-4 GHz 1.4dB
 1dB) 4-8 GHz 1.8dB
 8-12 GHz 1.9dB
 12-18 GHz 2.0dB
- **ISOLATION:** 0.5-2 GHz 70dB
 2-4 GHz 80dB
 4-8 GHz 85dB
 8-12 GHz 50dB
 12-18 GHz 40dB
- **VSWR:** 0.5-2 GHz 1.3:1
 2-4 GHz 1.3:1
 4-8 GHz 1.6:1
 8-12 GHz 1.8:1
 12-18 GHz 2.0:1
- **SPEED:** RISE: 50ns TYPICAL, 75ns MAX.
 FALL: 50ns TYPICAL, 75ns MAX.
 DELAY ON: 200ns MAX.
 DELAY OFF: 200ns MAX.
- **POWER INPUT:** (CW)+20dBm (STANDARD), +10 dBm (HIGH SPEED)
- **SURVIVAL POWER:** 1 WATT CW, 10 WATTS PEAK 1 usec
- **CONTROL:** TTL LOGIC "0"= J1-J2 ON "1"= J1-J3 ON
- **POWER SUPPLY:** +5V @ 100 mA MAX.
 +15V @ 10 mA MAXIMUM
- **CONNECTORS:**
 RF REMOVABLE SMA FEMALE
 CONTROL SOLDER PIN
- **SIZE:** 1.10" (L) x 0.85" (W) x 0.38" (H)
- **WEIGHT:** 0.75 OUNCE TYPICAL

M/N=MODEL NUMBER
 O/N=OPTION NUMBER
 S/N=SERIAL NUMBER
 P/N=PART NUMBER

OPTIONS:

- SINGLE CONTROL WITH SOLDER PIN STANDARD
- IND-SP INDEPENDENT CONTROL WITH SOLDER PIN (LOGIC "0" = ON "1" = OFF)
- SMC SINGLE CONTROL WITH SMC MALE
- IND-SMG INDEPENDENT CONTROL WITH SMC MALE (LOGIC "0" = ON "1" = OFF)
- 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 1.0 dB AT 20 GHz)
- 1020 10 GHz TO 20 GHz (INSERTION LOSS INCREASES BY 1.0 dB AT 20 GHz)
- B01 -12V POWER SUPPLIES (NOT AVAILABLE WITH SINGLE SUPPLY SEE 100-4715-1)
- B02 -15V POWER SUPPLIES (NOT AVAILABLE WITH SINGLE SUPPLY SEE 100-4715-1)
- B03 REVERSE LOGIC "1"=ON "0"=OFF
- B04 DRIVERLESS, CURRENT CONTROLLED (NOT AVAILABLE WITH SINGLE SUPPLY SEE 100-4715-1)
- B05 HIGH SPEED, TURNON/TURNOFF 20 nsec MAXIMUM
- B06 WHEN APPLICABLE OR OPTION HS (NOT AVAILABLE WITH SMC CONTROL)(NOT AVAILABLE WITH SINGLE SUPPLY SEE 100-4715-1)
- B08 HIGH POWER - SPECIFY CW POWER, PEAK POWER, PULSE WIDTH, DUTY CYCLE, RF FREQUENCY AND BANDWIDTH (NOT AVAILABLE WITH SINGLE SUPPLY SEE 100-4715-1)
- 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:

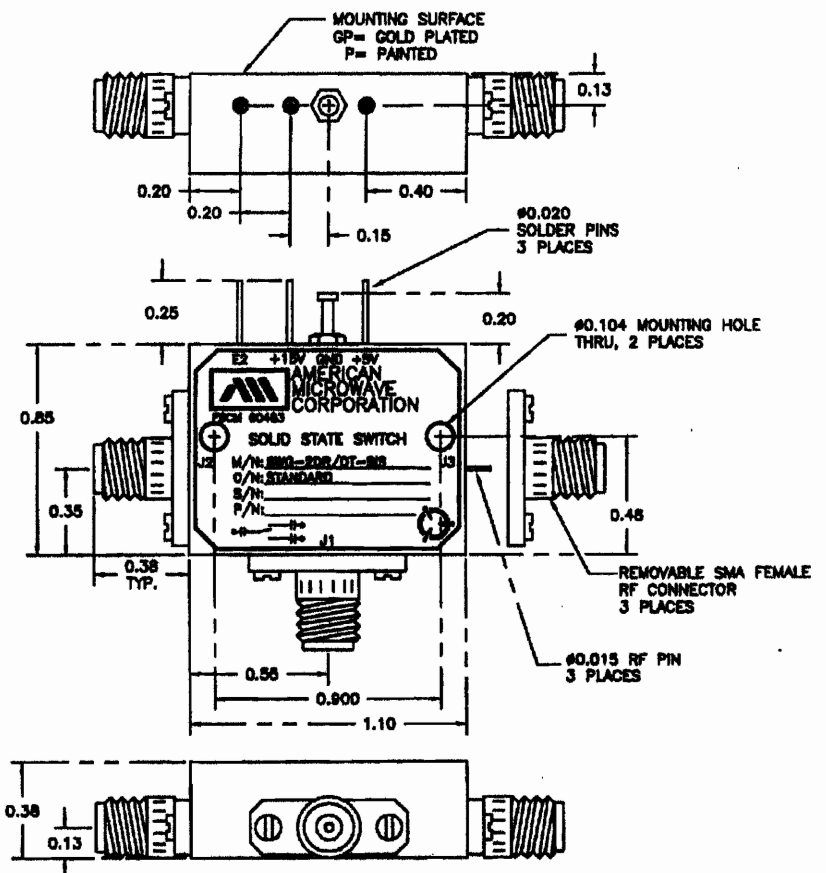
- **TEMPERATURE:** -55°C TO +85°C (OPERATING)
 -85°C TO +125°C (STORAGE)
- **HUMIDITY:** MIL-STD-202F, METHOD 103B COND. B
- **SHOCK:** MIL-STD-202F, METHOD 213B COND. B
- **VIBRATION:** MIL-STD-202F, METHOD 204D COND. B
- **ALTITUDE:** MIL-STD-202F, METHOD 105C COND. B
- **TEMPERATURE CYCLE:** MIL-STD-202F, METHOD 107D COND. A

ALL DIMENSIONS ARE IN INCHES

TOLERANCES:
 X.XX ±0.020
 X.XXX ±0.010

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

REV. NO.		DESCRIPTION	DATE	APPROVED
		ORIGINAL RELEASE	8/16/99	



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

PART NO.		AMERICAN MICROWAVE CORPORATION FREDERICK, MARYLAND		
APPROVALS	DATE	TITLE		
DRAWN WSP	8/16/99	OUTLINE DRAWING SWG-2DR/DT-SIS-STANDARD REFLECTIVE OR NON-REFLECTIVE/ABSORPTIVE SOLID STATE SWITCH		
CHECKED LH	7/29/99	SIZE	FORM NO.	DRG NO.
ISSUED		A	60483	100-4716-2
SCALE		SHEET		1 of 1