

DESCRIPTION

AMC MODEL SWM-DC20-1D IS A REFLECTIVE GaAs MMIC SPST SWITCH/MODULATOR WITH INTEGRAL TTL DRIVER, DESIGNED FOR ULTRA BROAD-BAND, FAST SWITCHING TIME, AND LOW DC POWER CONSUMPTION, PACKAGED IN A LOW PROFILE HOUSING.

SPECIFICATIONS

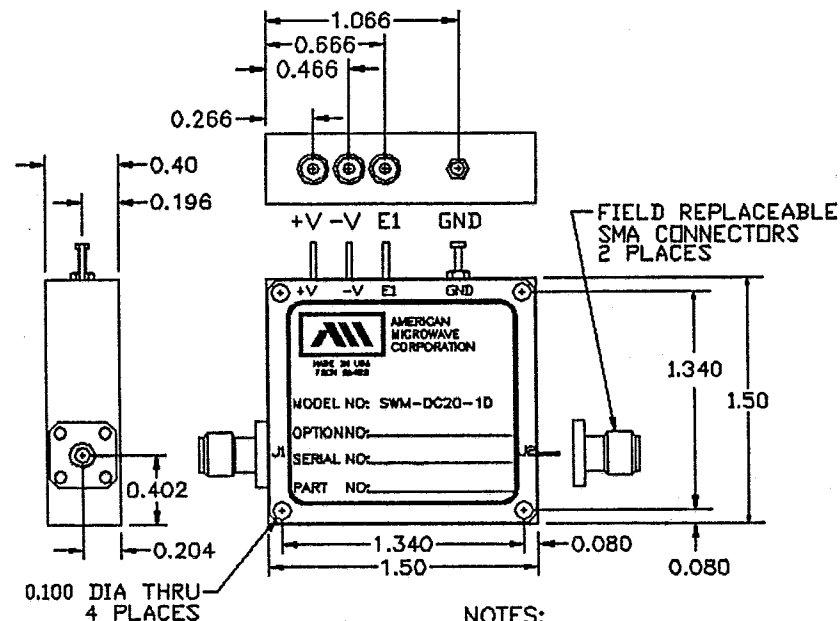
- FREQUENCY RANGEDC-20 GHz
- INSERTION LOSSDC-10 GHz, 2.2 dB MAXIMUM
10-18 GHz, 2.5 dB MAXIMUM
18-20 GHz, 3.2 dB MAXIMUM
- ISOLATIONDC-10 GHz, 40 dB MINIMUM
10-18 GHz, 35 dB MINIMUM
18-20 GHz, 30 dB MINIMUM
- VSWR (ON).....2:1 MAXIMUM
- SWITCHING TIME
RISE (10% RF TO 90% RF)10 ns MAXIMUM
FALL (90% RF TO 10% RF)10 ns MAXIMUM
ON (50% TTL TO 90% RF)20 ns MAXIMUM
OFF (50% TTL TO 10% RF)20 ns MAXIMUM
- RF POWER RATINGS (1DB COMP.)
0.5-20 GHz+25 dBm TYPICAL
0.05 GHz+18 dBm TYPICAL
- CONTROLTTL COMPATIBLE, UNITY LOAD
LOGIC "0" ISOLATION
LOGIC "1" INSERTION LOSS.
- POWER SUPPLY.....+7VDC TO +18VDC $\pm 5\%$ @25 mA MAXIMUM
-7VDC TO -18VDC $\pm 5\%$ @25 mA MAXIMUM
- CONNECTORS
RF INPUT/OUTPUT.....FIELD REPLACEABLE SMA (FEMALE)
POWERSOLDER PIN
CONTROLSOLDER PIN
NOTE: RF CONNECTORS CAN BE PLACED SIDE BY SIDE OR IN ANGLE.
(CONSULT FACTORY FOR AVAILABLE MECHANICAL OPTIONS)
- SIZE.....1.50" x 1.50" x 0.40"

AVAILABLE OPTIONS

- A01.....50 Ω CONTROL IMPEDANCE
- A02.....100 Ω CONTROL IMPEDANCE
- A03.....HERMETIC SEALING (MIL-STD-883)
- A04..... ± 5 VDC POWER SUPPLY
- A05.....INVERSE CONTROL LOGIC (LOGIC "0" = INSERTION LOSS)
- A06.....SINGLE ENDED ECL CONTROL LOGIC
- A07.....BALANCED ECL CONTROL LOGIC
- A08.....DIFFERENTIAL TTL CONTROL LOGIC(R2-422 LOGIC FAMILY)
- A09.....HIGH ISOLATION (CONSULT FACTORY)
- A10.....SMC MALE CONTROL CONNECTOR
- A11.....SMA FEMALE CONTROL CONNECTOR
- A12.....OTHER POWER SUPPLIES (CONSULT FACTORY)

REVISIONS			DATE	APPROVED
ZONE	REV.	DESCRIPTION		
	A	ORIGINAL RELEASE, NEW DEVELOPMENT	11/22/92	<i>JMY</i>

MECHANICAL OUTLINE



NOTES:

- 1) DIMENSIONS ARE IN INCHES
- 2) TOLERANCES: X.XX ± 0.020
X.XXX ± 0.010
- 3) WEIGHT: APPROX. 1.3 OZ

ENVIRONMENTAL RATINGS

- TEMPERATURE.....-55°C TO +95°C (OPERATING)
-65°C TO +125°C (STORAGE)
- HUMIDITYMIL-STD-202F, METHOD 103B COND. B
- SHOCKMIL-STD-202F, METHOD 213B COND. B
- VIBRATION.....MIL-STD-202F, METHOD 204D COND. B
- ALTITUDEMIL-STD-202F, METHOD 105C COND. B
- TEMPERATURE CYCLE.....MIL-STD-202F, METHOD 107D COND. A



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APPROVALS	DATE
DRAWN <i>WSP</i>	11/22/92
CHECKED <i>[Signature]</i>	11/22/92

PRODUCT FEATURE

SWM-DC20-1D

DC-20 GHz, GaAs MMIC, REFLECTIVE, ULTRA BROAD-BAND SPST SWITCH/MODULATOR

SIZE A SHEET 1 OF 2 DWG. # 100-2914