



TEST REPORT
ON
3.75 TO 6 GHz
SINGLE POLE SINGLE THROW
ABSORPTIVE / NON-REFLECTIVE SWITCH MODULE

AMC MODEL No:
SWN-2184-1AT
OPTION 36, 12X, LVT

Serial Numbers: 1MS909319

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ISO9001 : 2000 CERTIFIED

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SINGLE POLE SINGLE THROW ABSORPTIVE / NON-REFLECTIVE SWITCH MODULE AMC MODEL No: SWN-2184-1AT OPTION 36, 12X, LVT

FEATURES:

- **LOW INSERTION LOSS**
- **HIGH ISOLATION**
- **LOW VIDEO TRANSIENTS**
- **LOW HARMONIC DISTORTION**

SPECIFICATIONS:

● FREQUENCY	: 3.75 TO 6 GHz
● INSERTION LOSS	: 1.2 dB MAXIMUM
● ISOLATION	: 60 dB MINIMUM
● VSWR	: 1.5:1
● SWITCHING SPEED	: < 30 ns
● RISE / FALL TIME	: < 10 ns
● MAXIMUM TOGGLE RATE	: > 20 ns
● RF CONNECTORS	: SMA FEMALE
● DC POWER SUPPLY	: +5 V \pm 10% @ 100 mA MAXIMUM -5 V \pm 10% @ 100 mA MAXIMUM
● CONTROL	: TTL LOGIC "0"=ON , "1"=OFF
● CONTROL INTERFACE	: DC SOLDER PINS
● HARMONIC DISTORTION	: \leq 70 dB @ +10 dBm I/P
● FLATNESS ACROSS BAND (ON STATE)	: \pm 0.5 dB
● VIDEO LEAKAGE	: 100 mV PEAK TO PEAK, 500 MHz BANDWIDTH (-60 dBm TO -65 dBm LEAKAGE POWER OR ENERGY IN THE BAND OF INTEREST)
● 1 dB COMPRESSION POINT	: +20 dBm
● 2 TONE 3 RD ORDER INTERCEPT POINT, P _{OUT} 0dBm	: +35 dBm
● 2 TONE 2 ND ORDER INTERCEPT POINT, P _{OUT} 0dBm	: +55 dBm
● 0.1 dB PASS BAND	: 3.75 GHz TO 6 GHz

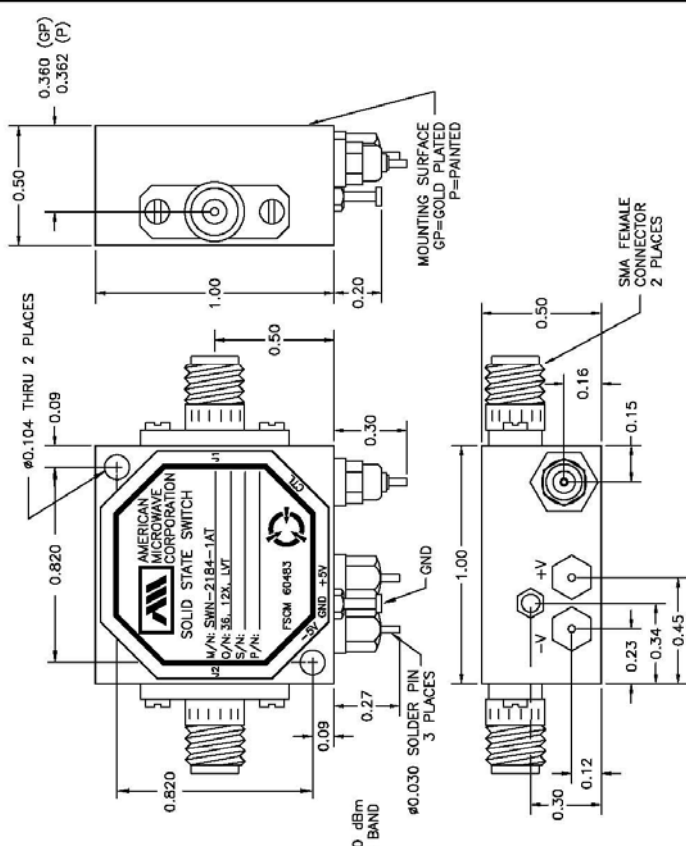
PRODUCT FEATURE

ZONE	REV.	DESCRIPTION	DATE	APPROVED
		ORIGINAL RELEASE	8/20/99	

DESCRIPTION:
 AMC MODEL SWN-2184-1AT OPTION 36, 12X, LVT IS A SINGLE POLE SINGLE THROW, ABSORPTIVE/NON-REFLECTIVE SWITCH MODULE WITH VERY LOW INSERTION LOSS, HIGH ISOLATION AND WITH INTEGRAL TTL DRIVER, DESIGNED FOR LOW VIDEO TRANSIENTS AND LOW HARMONIC DISTORTION OVER 3.75 TO 6.0 GHz BANDWIDTH.

SPECIFICATIONS:

- FREQUENCY: 3.75 GHz TO 6.0 GHz
- INSERTION LOSS: 1.2 dB MAXIMUM
- ISOLATION (ANY PORT): 60 dB MINIMUM
- VSWR (ANY PORT ANY STATE): 1.5:1
- SWITCHING SPEED: <30 ns
- RISE/FALL TIME: (50% TTL TO 10%/90% RF) <10 ns
- (10% TO 90% RF) <10 ns
- (90% TO 10% RF) <10 ns
- MAXIMUM TOGGLE RATE: >20 MHz
- (50% DC)
- RF CONNECTORS: SMA FEMALE
- DC POWER SUPPLY: +5V ±10% @ 100 mA MAXIMUM
- -5V ±10% @ 100 mA MAXIMUM
- CONTROL: TTL LOGIC '0' = ON '1' = OFF
- CONTROL INTERFACE: DC SOLDER PINS
- HARMONIC DISTORTION: ≤ 70dB @ +10 dBm I/P
- FLATNESS ACROSS BAND: ±0.5dB
- VIDEO LEAKAGE: 100 mV PEAK TO PEAK, 500 MHz BANDWIDTH (-60 dBm TO -65 dBm LEAKAGE POWER OR ENERGY IN THE BAND OF INTEREST)
- 1 dB COMPRESSION POINT: +20 dBm
- 2 TONE 3RD ORDER INTERCEPT POINT, POUT 0dBm: +35 dBm
- 2 TONE 2RD ORDER INTERCEPT POINT, POUT 0dBm: +55 dBm
- 0.1 dB PASS BAND: 3.75 GHz TO 6.0 GHz
- WEIGHT: 1.5 OUNCES TYPICAL
- SIZE: 1.00 (L) X 1.00 (W) X 0.50 (H)



MOUNTING SURFACE
GP=GOLD PLATED
P=PAINTED

SMA FEMALE CONNECTOR
2 PLACES

#0.030 SOLDER PIN
3 PLACES

ENVIRONMENTAL RATINGS:

- TEMPERATURE: -10°C TO +55°C (OPERATING)
- -40°C TO +71°C (STORAGE)
- HUMIDITY: 95% OVER TEMPERATURE
- 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

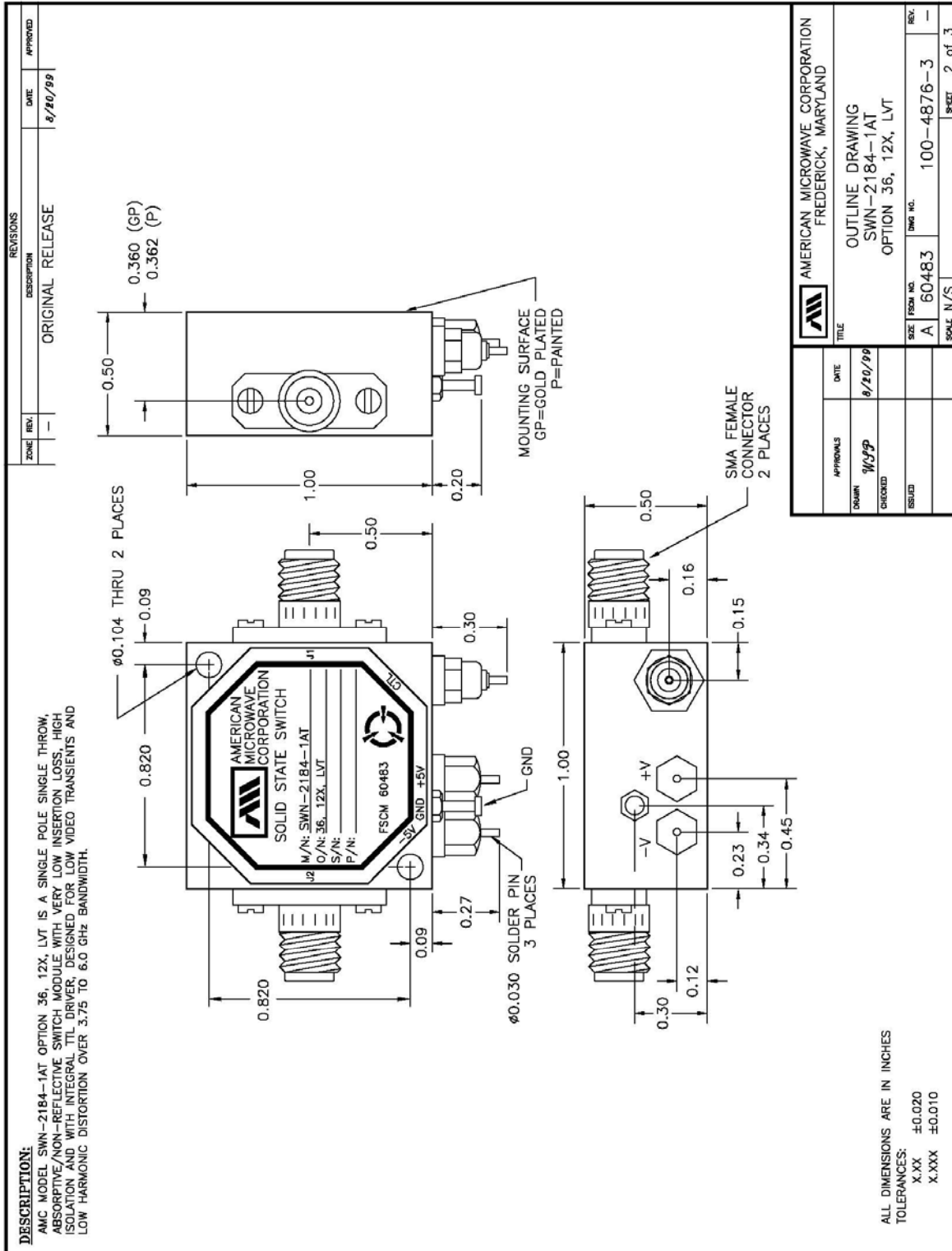
NOTE:
 DT=WITH DRIVER, NON-REFLECTIVE/ABSORPTIVE

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

APPROVALS	DATE	TITLE	DRAWN	CHECKED	SOLID
	8/20/99	PRODUCT FEATURE SWN-2184-1AT OPTION 36, 12X, LVT	WJG		

SIZE	FORM NO.	DRAWING NO.	REV.	SHEET
A	60483	100-4876-3	-	1 of 3

OUTLINE DRAWING



FUNCTIONAL SCHEMATIC

