

DESCRIPTION

AMC MODEL AGTN-2018-120DD-100 IS A BROAD BAND VARIABLE ATTENUATOR/MODULATOR, CONTROLLED BY 9 BIT POSITIVE TRUE BINARY LOGIC.

SPECIFICATIONS

- FREQUENCY RANGE:2.0 TO 18.0 GHz MINIMUM
- INSERTION LOSS:11.0 dB MAXIMUM (10.5 dB TYPICAL)
- ATTENUATION FLATNESS (± dB MAXIMUM): 0-30 dB ± 1.0 dB MAXIMUM
 30-40 dB ± 1.5 dB MAXIMUM
 40-50 dB ± 2.5 dB MAXIMUM
 50-60 dB ± 4.0 dB MAXIMUM
 60-80 dB ± 7.5 dB MAXIMUM
 80-120 dB ± 13.0 dB MAXIMUM
- ATTENUATION ACCURACY: 0-20 dB ± 2.5 dB MAXIMUM
 20-30 dB ± 1.5 dB MAXIMUM
 30-50 dB ± 1.5 dB MAXIMUM
 50-80 dB ± 2.0 dB MAXIMUM
 80-120 dB ± 2.5 dB MAXIMUM
- SWITCHING TIME: < 1 uSec
- VSWR: 2.2:1 MAXIMUM
- RF POWER RATINGS:
 OPERATING: +20 dBm CW MAXIMUM
 +10 dBm (0.3 GHz OR BELOW)
 SURVIVAL: +30 dBm CW MAXIMUM
 +27 dBm (0.3 GHz OR BELOW)
- CONTROL: 9 BIT TRUE BINARY LOGIC
- POWER SUPPLY: +12 VDC @ 375 mA MAXIMUM
 -12 VDC @ 50 mA MAXIMUM
- CONNECTORS:
 RF INPUT/OUTPUT: SMA FEMALE
 POWER AND CONTROLS: 15 PIN MICRO-D SUBMINIATURE (MALE)
 MATING CONNECTOR FURNISHED
- SIZE: 3.00" x 2.50" x 0.50"

OPTIONS:

- A01: TWO SMA MALE RF CONNECTORS
- A02: J1 SMA MALE, J2 SMA FEMALE
- A03: MOUNTING SURFACE UNPAINTED
- A04: ANALOG CONTROLLED UNIT OF 20 dB/VOLT. PIN 2 IS USED AS CONTROL (OTHER CONTROL VOLTAGES AVAILABLE).
 FOR SOLDER PIN UNITS REFER TO DATA SHEET AGTN-2018-120D-100
- A05: ±15 VDC POWER SUPPLY
- A06: 0-30 dB RANGE
 FLATNESS: 0-15 dB: ± 0.5 dB ACCURACY: 0-10 dB: ± 2.5 dB
 15-20 dB: ± 1.0 dB 10-20 dB: ± 1.5 dB
 20-25 dB: ± 1.5 dB 20-30 dB: ± 1.5 dB
 25-30 dB: ± 2.0 dB
- A07: EXTENDED FREQUENCY RANGE UNITS AND OPTIONS
 200M18 OPTION: EXTENDED BANDWIDTH (200 MHz TO 18 GHz)
 300M18 OPTION: EXTENDED BANDWIDTH (300 MHz TO 18 GHz)
 10M18 OPTION: EXTENDED BANDWIDTH (10 MHz TO 18 GHz) WITH SLOWER SPEED
 REFER TO DATA SHEETS AGT-2018-120DD-100 (DIGITAL CONTROL)
 OR AGT-2018-120D-100 (SOLDER PIN ANALOG CONTROLLED).
- 219 OPTION: EXTENDED BANDWIDTH (2 GHz TO 19 GHz)
- A08: 8 BIT TRUE BINARY LOGIC
- A09: FREQUENCY BAND OF 2 TO 18 GHz
- A10: 10 BIT TRUE BINARY LOGIC
- A11: 11 BIT TRUE BINARY LOGIC
- A12: 12 BIT TRUE BINARY LOGIC
- A13: FREQUENCY BAND OF 10 MHz TO 2 GHz REFER TO DATA SHEET
AGT-2000-120D-100 (SLIM LINE), FOR DIGITAL VERSION
 REFER TO DATA SHEET AGT-2000-120DD-100 (SLIM LINE)
- A14: LATCHING STROBE (NOT AVAILABLE WITH OPTION A12)
- SCS: SPECIAL CUSTOMER SPECIFICATIONS

NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE
 NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

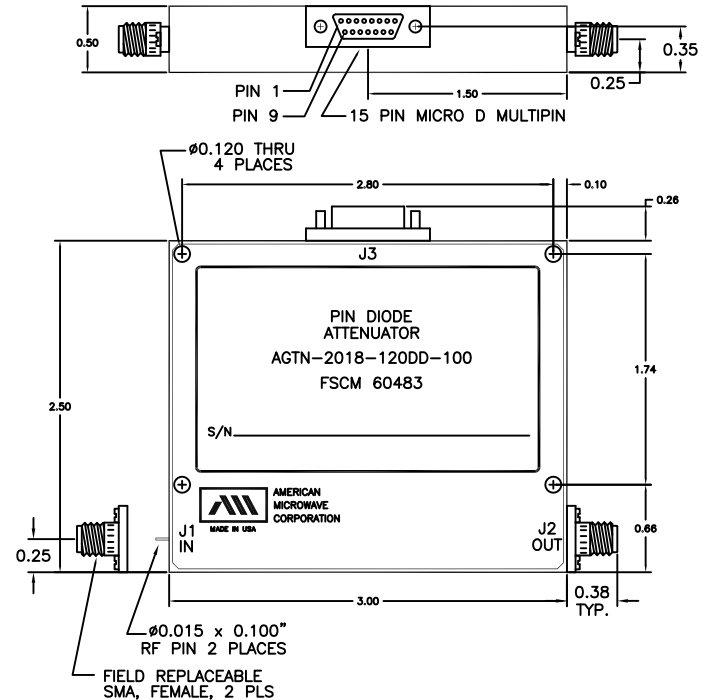
CONTROL VOLTAGE	NOMINAL ATTENUATION *
1 VOLT	20dB
2 VOLT	40dB
3 VOLT	60dB
4 VOLT	80dB
5 VOLT	100dB
6 VOLT	120dB

* NOTE: SEE ATTENUATION ACCURACY
 ALSO SEE ATTENUATION FLATNESS
 SPEC SEPERATE FROM ACCURACY

PIN FUNCTIONS		
PIN NO.	PIN DESG.	FUNCTIONS.
PIN 2	CTL	VOLTAGE CONTROL
PIN 5	GND	GND
PIN 10	-V	POWER VOLTAGE
PIN 11	+V	POWER VOLTAGE

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

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	ORIGINAL RELEASE	11/11/97	
	B	SEE ECN # 05-057	8/18/05	
	C	SEE ECN # 11-042	3/31/11	RA
	D	SEE ECN # 11-048	4/19/11	RA



ENVIRONMENTAL RATINGS:

- TEMPERATURE: -55°C TO +125°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

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APPROVALS		DATE	TITLE			
DRAWN <i>BLG</i>		11/11/97	PRODUCT FEATURE AGTN-2018-120DD-100			
MODIFIED <i>HJH</i>		8/18/05	2-18 GHz, PROGRAMMABLE VARIABLE ATTENUATOR			
ISSUED			SIZE	FSCM NO.	DWG NO.	REV.
			A	60483	100-4259	D
			SCALE N:S		SHEET 1 OF 4	