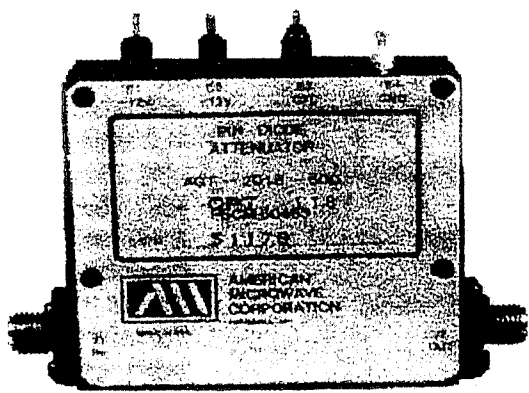




AGT-2018-60D MULTI-OCTAVE PIN DIODE ATTENUATOR/MODULATOR 0.3 - 18 GHz



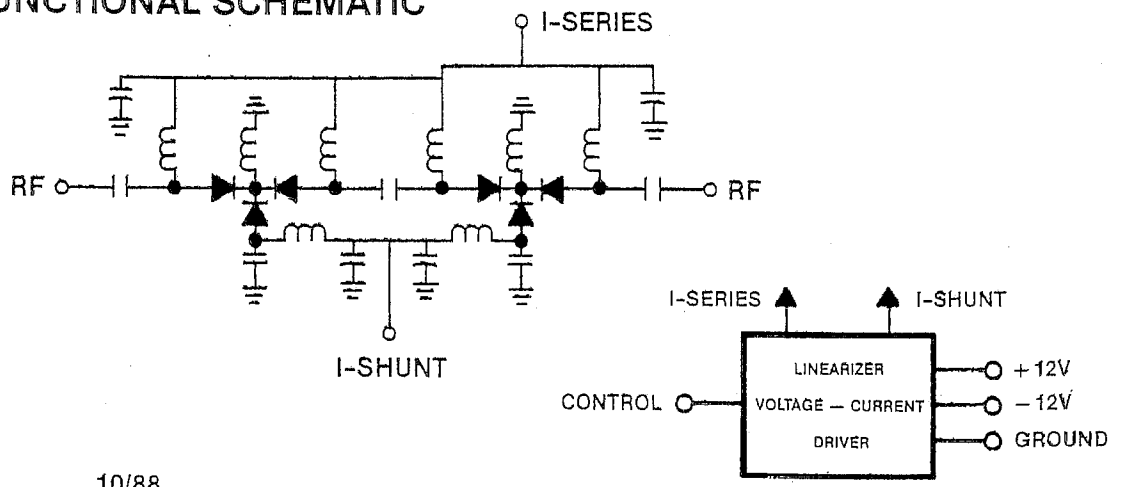
FEATURES

- Solid State Reliability
- Absorptive Type
- Linearized
- Voltage Controlled

DESCRIPTION

The AGT Suffix D Series are voltage controlled linearized attenuator/modulators that operate over the 0.3 to 18 GHz band and are non-reflective at all attenuation levels. The units consist of an AGT Series Dual "Tee" Pad Pin Diode Attenuator and Integrated Hybrid Linearizers for the Series and Shunt Diodes. The standard model covers the frequency band from 2 - 18 GHz with a band extension option to 0.3 GHz.

FUNCTIONAL SCHEMATIC



10/88

REVISED
OCTOBER 9, 1997

7311G GROVE ROAD, FREDERICK, MARYLAND 21701 Tel.: (301) 662-4700
Fax: (301) 662-4938

SPECIFICATIONS

Frequency Range:	2 - 18 Ghz (Standard Unit) 0.3 - 18 Ghz (Option 007)
Insertion loss:	4.5 dB, Maximum
Attenuation Range:	0 - 60 dB (see note 1)
Attenuation Flatness:	0 - 30 dB ± 1 dB 30 - 40 dB ± 2 dB 40 - 50 dB ± 3 dB 50 - 60 dB ± 5.5 dB
Accuracy: (see note 1)	0 - 10 dB ± 2 dB 10 - 20 dB ± 1 dB 20 - 40 dB ± 1.5 dB 40 - 60 dB ± 2 dB
Power Handling (Operating):	+20 dBm, (2 - 18 Ghz) +10 dBm, (0.3 - 2 Ghz) Option 007 only
Power Handling (Survival):	+30 dBm, Survival +27 dBm, Survival (Option 007)
Rise and Fall Time:	3 microseconds, Maximum
Monotonicity:	Guaranteed
Control Characteristics:	Range: 0 to +6V DC Transfer Function: 10 dB/Volt Input Impedance: 10K Ohms
Power Supply Requirements:	+12V, $\pm 5\%$ @ 250 mA Maximum, 210 mA Typical -12V, $\pm 5\%$ @ 50 mA Maximum, 30 mA Typical

NOTES

1. Attenuators are linearized to nominal (average) attenuation over the operating band unless otherwise specified. Attenuation range and accuracy are expressed in terms of nominal attenuation setting.

2. Option 6 Accuracy Insertion Loss and Flatness is as specified below:

Flatness:	0 - 15 dB ± 0.5 dB	Accuracy:	0 - 10 dB ± 2.0 dB
	15 - 20 dB ± 1.0 dB		10 - 20 dB ± 1.0 dB
	20 - 25 dB ± 1.5 dB		20 - 30 dB ± 1.5 dB
	25 - 30 dB ± 2.0 dB		

Insertion Loss: 3.5 dB Maximum

Control Voltage: 0 to +3V DC

3. Option 7 Flatness specifications are the same as standard unit

ENVIRONMENTAL RATINGS

Temperature Range:

Operating: -55° C to $+125^{\circ}$ C

Storage: -65° C to $+125^{\circ}$ C

Humidity: MIL-STD-202C, Method 103B, Cond. B
(96 Hrs. @ 95%)

Shock: MIL-STD-202C, Method 213, Cond. B
(75G, 6 msec)

Vibration: MIL-STD-202C, Method 204A, Cond. B
(.06" double amplitude or 15G whichever
is less).

Altitude: MIL-STD-202C, Method 105C, Cond. B
(50,000 ft.)

Temp. Cycling: MIL-STD-202C, Method 102, Cond. D, 5 cycles.

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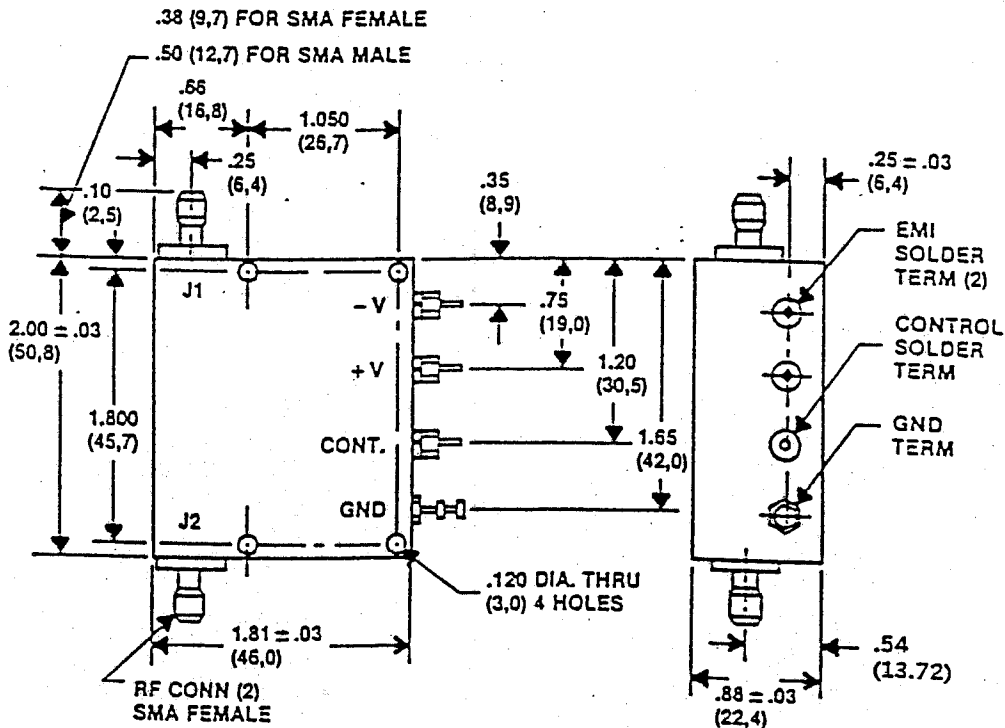
Handwritten: R.A. WP
B.G. PW EK
H/b

AVAILABLE OPTIONS

Option No.	Description
001	Two SMA male RF connectors
002	One SMA male and one SMA female RF connector
003	SMA female control connector
004	5 dB/Volt sensitivity
005	± 15V DC power supply
006	0 - 30 dB range (see Note 2)
007	Extend frequency band 0.3 - 18 GHz (see Note 3)
008	Frequency Band 2 - 8 GHz

MECHANICAL DATA

Dimensions and Weights



WEIGHT: 85 GRAMS (3 OZ.) APPROX.

TOLERANCES: .XX = .02 INCHES
 .XXX = .005 INCHES

*R.A. WP HSB
 BG PW EK*

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