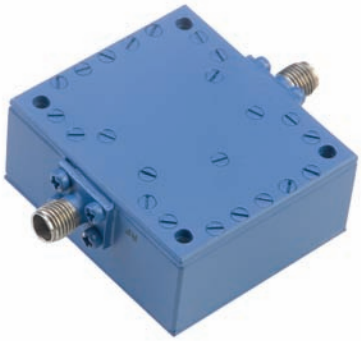

PIN DIODE

ATTENUATORS

GA & 1-GT SERIES

GENERAL INFORMATION

Aeroflex-KDI PIN Diode Attenuators continuously change the amplitude of a microwave signal by varying DC Voltage, or a digital signal, depending on the model type selected. The two standard models have temperature compensation options which operate over -55°C to +85°C. A matched configuration of diodes keeps the VSWR low through all values of attenuation and frequency.

GENERAL SPECIFICATIONS

RF Power: To prevent self biasing, the attenuators should be operated at less than 100 mW CW , and 60 W peak. Units will not be damaged by application of 1 Watt CW or 100 Watts Peak.

Power: ±15 Volts at ±50 mA MAX

Control Voltage: 0-10 Volts produce 0-64dB Attenuation (Max Control Voltage is 10 Volts)

Switching: Units typically can be changed from any value of attenuation to any other value in 2µS.

Connectors: SMA Standard.

NOTES

1) Two/Tone intermodulation products: Second and third order products approximately 50 dBc for Pin ≤ 0 dBm (each signal) at all attenuation settings.
2) If a narrow frequency bandwidth is required, Aeroflex-KDI can supply a unit that is electrically optimized for that bandwidth. Mechanical dimensions will remain the same as the standard unit, and the price will generally be lower.
3) When ordering, add suffix indicating required temperature compensation range to the model number, i.e., The 1-GT-31-TT, compensated over the temperature range -55°C to +85°C. Standard units are +10°C to +40°C.
4) Monotonicity guaranteed for all models.

1-GT-(XX)

Voltage Controlled – 10°C to 40°C

Input – ±15 Volts @ 50mA

Control Voltage – 0-10 Volts max

-55°C to +85°C Models add… (-TT) to the part number

GA-(XX)

Digital TTL Controlled – 10°C to 40°C

Input – ±15 Volts @ 50mA

TTL Control – 8 BITS (LSB=.25dB)

-55°C to +85°C Models add… (-TT) to the part number

Type (XX)	Frequency GHz	VSWR Max	Insertion loss (dB Max)	Attenuation Range dB	Outline 1-GT-(XX)	Outline GA-(XX)
14	.5-1.0	1.5	2.5	64	12	22
20	1.0-2.0	1.5	2.8	64	14	24
26	2.0-4.0	1.5	3.1	64	14	24
31	4.0-8.0	1.75	3.4	64	16	26
40	8.0-12.4	2.1	3.8	64	17	26
42	8.0-18.0	2.2	3.75	64	17	26
44	12.0-18.0	2	3.75	64	17	26

ATTENUATION ACCURACY		
@ 25° C	+10 to +40°C	-55 to +85° C
±.4dB to 10dB	±.5dB to 10dB	±.75dB to 10dB
±.75dB to 20dB	±.1.0dB to 20dB	±1.2dB to 20dB
±1.0dB to 30dB	±1.5dB to 30dB	±1.5dB to 30dB
±1.25dB to 40dB	±1.7dB to 40dB	±2.0dB to 40dB
±1.75dB to 64dB	±2.5dB to 64dB	±3.0dB to 64dB

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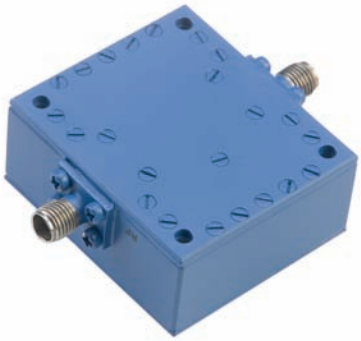
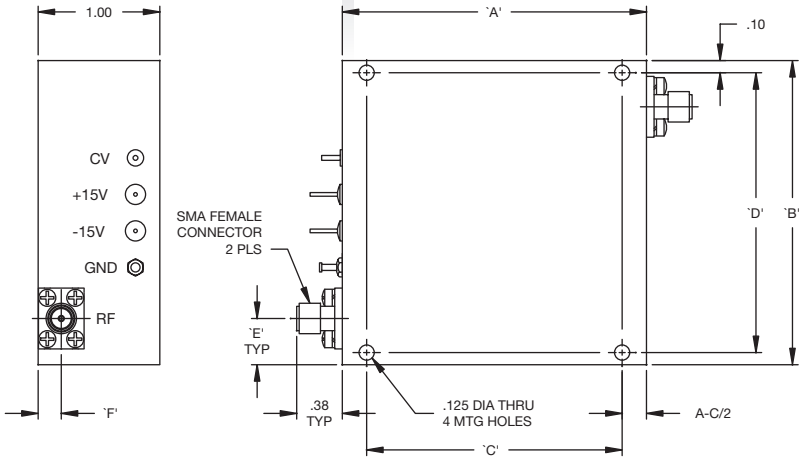
www.aeroflex-kdi.com • sales@aeroflex-kdi.com



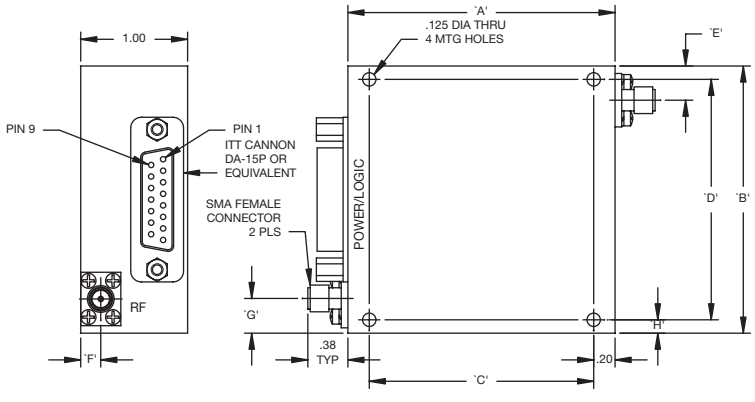
PIN DIODE

ATTENUATORS

GA & 1-GT SERIES



Series 1-GT-(XX) VOLTAGE CONTROLLED OUTLINES (inches)						
OUTLINE	A'	B'	C'	D'	E'	F'
12	5.00	2.50	4.60	2.30	0.32	0.19
14	3.50	1.75	3.10	1.55	0.38	0.19
16	1.80	1.80	1.40	1.60	0.35	0.25
17	1.50	1.50	1.10	1.30	0.35	0.25



GA-XX Series Power Logic PIN Connections	
PIN	Function
1-12	Logic
13	+15 V
14	-15V
15	GND
PIN 1 is the Least significant BIT	

Series GA-(XX) DIGITAL CONTROLLED OUTLINES (inches)								
OUTLINE	A'	B'	C'	D'	E'	F'	G'	H'
22	5.00	2.50	4.60	2.25	0.32	0.13	0.32	0.19
24	3.50	1.75	3.10	1.55	0.40	0.10	0.35	0.19
26	2.50	2.50	2.10	1.75	0.50	0.13	0.50	0.25