DIGITAL SWITCHED PAD
PIN DIODE ABSORPTIVE ATTENUATORS

Stable – Monotonic Attenuation Performance – High Speed

G.T. Microwave Features:

Frequency Ranges: From 250 MHz to 20 GHz any optimized bandwidth is available.

TTL Compatable Logic: Logic '1'/BIT = Value of Attenuation and all Logic '0' = Insertion Loss. Attenuators without TTL driver; +1VDC @ +60mA = Value set and all −1VDC @ −60mA = Insertion Loss. For options, consult factory.

High Speed Switching: Attenuators listed are measured from 50% TTL to 10%/90% RF. Faster switching speeds are available upon request.

Low DC Power Consumption: Attenuators with TTL drivers require ?5VDC @ ?50mA/BIT.

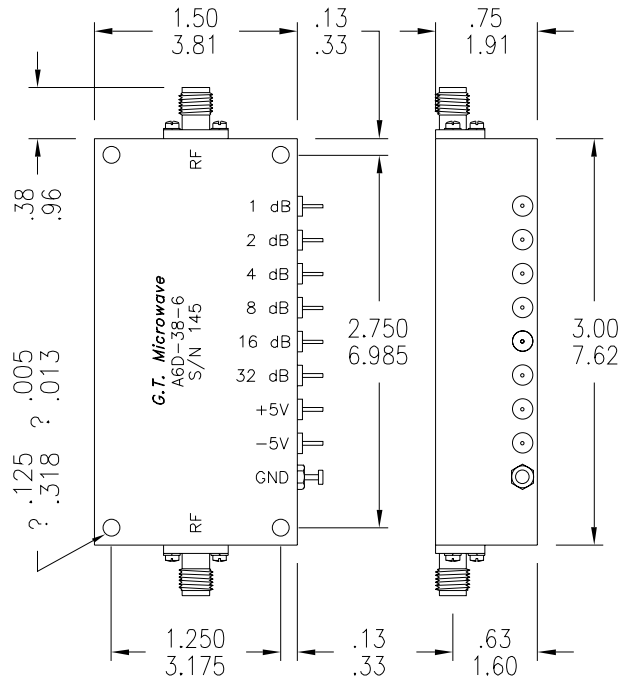
High RF Power Handling: For power levels greater than listed, please consult factory.

Stable Attenuation: Variation vs Temperature listed is from −55? to 85?C.

Standard Interfaces: RF port connectors are 'SMA', female per MIL−C−39012. DC/LOGIC connections are solder terminals. Call factory for optional connectors.

Matched Phase & Amplitude: Models listed are available matched unit to unit.

Life Time Integrity: G.T.M.I.'s attenuators are designed to meet MIL−E−16400, Range 1 and MIL−E−5400, Class 2 environments operating within the −55? to +85?C temperature range. MIL−STD−883 screening, −90 dBc RFI/EMI shielding, video filtering and 10^{-6}cc/SEC hermeticity are available. Page 2 has Environmental Ratings.



DIMENSIONS ARE EXPRESSED IN / CM TOLERANCES ? .02 / .05 ? .010 / .025

Microwave Products Available

Switches	BP/QPSK & Vector Modulators	Couplers
Attenuators	Gain Equalizers	D.C. Blocks
Hybrids	Power Dividers/Combiners	Bias Tees
Phase Shifters	Custom Sub−Assemblies	Detectors

Passive, Linearized Voltage or Current Controlled Analog, Digital, Programmable and Temperature Compensated

Electrical Specifications for DIGITAL SWITCHED PAD ABSORPTIVE attenuators

FREQUENCY RANGE GHz	ATTENUATION RANGE dB	FLATNESS Vs FREQUENCY ? dB	INSERTION LOSS dB	SWITCHING SPEED nSEC	CONTROL INPUTS dB & No. LSB	MSB	BITS	V.S.W.R. MAX	INPUT POWER MAX
0.5−2.0	63	1.25 to 40 dB	4.0	150	1.0	32	6	1.6:1	+20 dBm
		1.50 to 63 dB							
2.0−8.0	63	1.50 to 40 dB	5.5	150	1.0	32	6	1.75:1	+20 dBm
		2.00 to 63 dB							
8.0−18.0	63	1.75 to 40 dB	7.0	150	1.0	32	6	2.0:1	+20 dBm
		2.50 to 63 dB							
2.0−18.0	63	2.25 to 40 dB	8.0	150	1.0	32	6	2.2:1	+20 dBm
		3.00 to 63 dB							

For substantial improvement in performance; ask for OPTIMIZED NARROWBAND models