

7 BIT DIGITAL ATTENUATOR *TAD5010*

Outline Drawings: Pages 14 -19

Available in: DP-8, 38 Pin Dip Package
and Connectorized Housings

Features

- 50 - 250 MHz
- 63.5 dB Attenuation Range
- Integral TTL Driver
- Operating Temp. - 55 °C to + 85 °C
- Screening to the tables of MIL-STD-883 available

Maximum Ratings

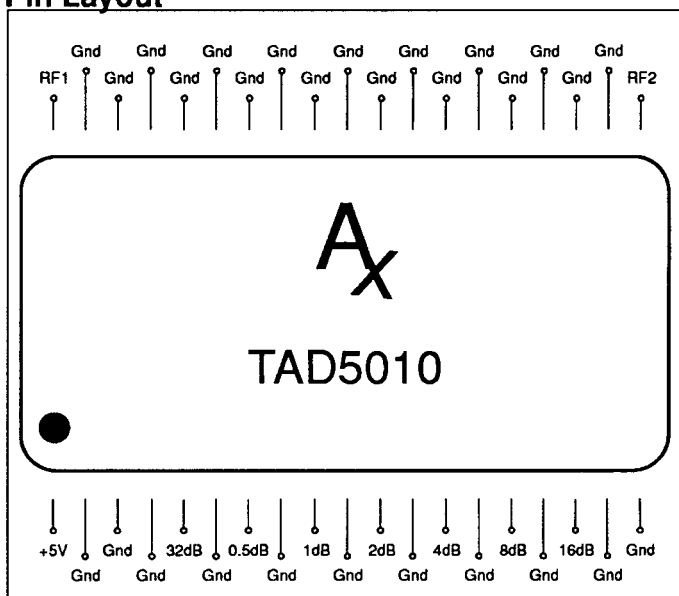
Ambient Operating Temperature - 55 °C to + 100 °C
Storage Temperature - 65 °C to + 125 °C
Case Temperature + 125 °C
DC Voltage +6 Volts
Continuous RF Input Power +30 dBm

Specifications

CHARACTERISTIC	TYPICAL $T_a = 25\text{ }^{\circ}\text{C}$	MIN/MAX $T_a = -55\text{ }^{\circ}\text{C to } +85\text{ }^{\circ}\text{C}$
Frequency	50 - 250 MHz	50 - 250 MHz
Insertion Loss (dB)	5.0	7.5 Max.
Attenuation Range (dB)	0.5 - 63.5	0.5 - 63.5
Steps (dB)	0.5, 1, 2, 4, 8, 16, 32	0.5, 1, 2, 4, 8, 16, 32
Accuracy	$\pm 0.2\text{ dB}$ $\pm 1.5\%$	$\pm 0.25\text{ dB}$ Max. $\pm 2.5\%$
VSWR	1.25:1	1.5:1 Max.
Switching Speed (μsec)	6	10 Max.
Switching Transients (V)	0.8	1.0 Max.
DC Bias	V_{dc} mA	
	+5 25	+5 30 Max.

Note: Care should always be taken to effectively ground the case of each unit

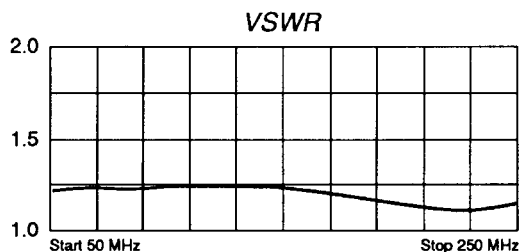
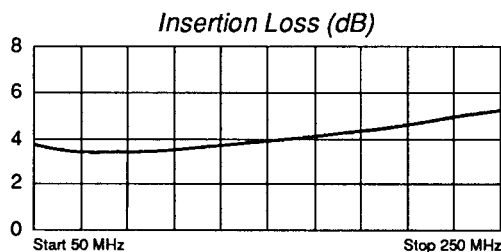
Pin Layout



Truth Table

Control Input 7 Line TTL	Attenuator Setting
1	Attenuate
0	Thru

Typical Performance Data



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Rev. A 09/04/92