7 Bit Digital Attenuator — Model TAD5010

Attenuation Range: 63.5 dB — 50 to 250 MHz

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

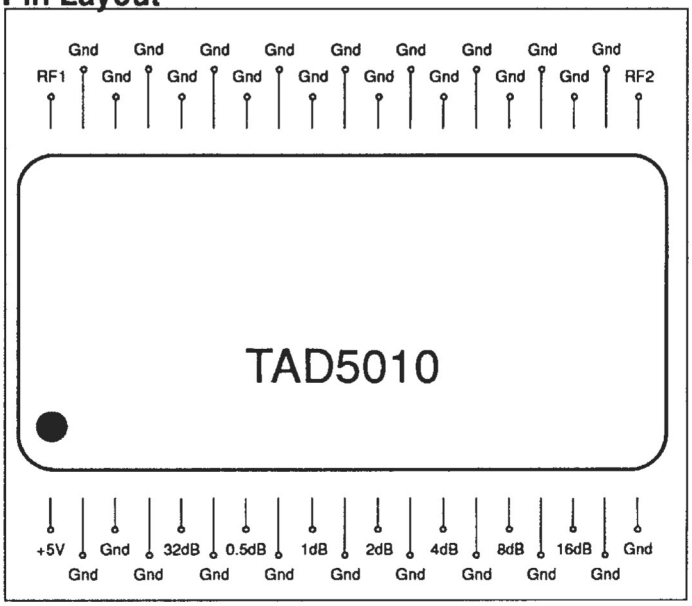
Ambient Operating Temperature . . . . . - 55 °C to + 100 °C
Storage Temperature . . . . . - 65 °C to + 125 °C
Case Temperature . . . . . + 125 °C
DC Voltage . . . . . +6 Volts
Continuous RF Input Power . . . . . +30 dBm

Specifications

CHARACTERISTIC	TYPICAL Ta = 25 °C	MIN/MAX Ta = - 55 °C to + 85 °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	±0.2 dB ±1.5%	±0.25 dB ±2.5% Max.
VSWR	1.25:1	1.5:1 Max.
Switching Speed (µsec)	6	10 Max.
Switching Transients (V)	0.8	1.0 Max.
DC Vdc Bias mA	+5 25	+5 30 Max.

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

Pin Layout



Truth Table

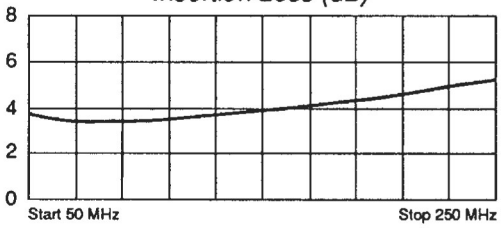
Control Input 7 Line TTL	Attenuator Setting
1	Attenuate
0	Thru

Packaging Options (see Appendix)

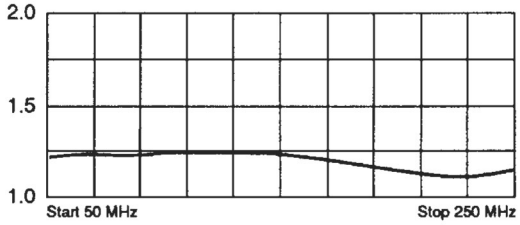
DP-8, 38 Pin Dip Package
and Connectorized Housings

Typical Performance Data

Insertion Loss (dB)



VSWR



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