

7 Bit Digital Attenuator

Attenuation Range: 12.7 dB

Model TAD5009

50 to 250 MHz

Features

- 50 - 250 MHz
- 12.7 dB Attenuation Range
- Integral TTL Driver
- Operating Temp. -55°C to +85°C
- Environmental Screening available

Maximum Ratings

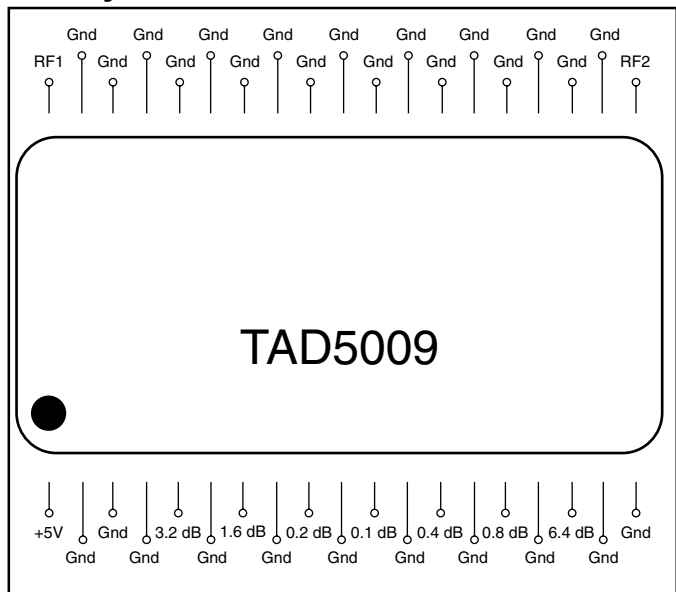
Ambient Operating Temperature -55°C to +100°C
 Storage Temperature -65°C to +125°C
 Case Temperature +125°C
 DC Voltage +6 Volts
 Continuous RF Input Power +20 dBm

Specifications

CHARACTERISTIC	TYPICAL Ta = 25°C	MIN/MAX Ta = -55°C to +85°C
Frequency	50 - 250 MHz	50 - 250 MHz
Insertion Loss (dB)	3	4.2 Max.
Attenuation Range (dB)	0.1 - 12.7	0.1 - 12.7
Steps (dB)	0.1, 0.2, 0.4, 0.8, 1.6, 3.2, 6.4	0.1, 0.2, 0.4, 0.8, 1.6, 3.2, 6.4
Accuracy	0.1 to 0.8 dB 0.9 to 6.3 dB 6.4 to 12.7 dB	± (0.05 dB + 2%) Max. ± (0.20 dB + 2%) Max. ± (0.30 dB + 3%) Max.
VSWR	1.25:1	1.5:1 Max.
Switching Speed (µsec)	2.5	5 Max.
Switching Transients (V)	0.8	1.0 Max.
DC Bias	Vdc mA	+5 15 Max.

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

Pin Layout



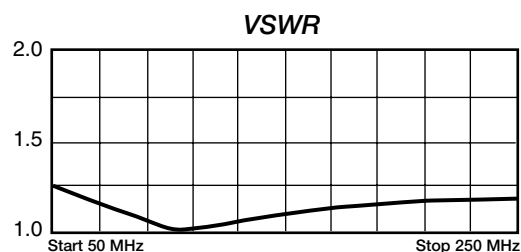
Truth Table

Control Input 7 Line TTL	Attenuator Setting
1	Attenuate
0	Thru

Packaging Options (see Appendix)

38 Pin DIP (DP-8)

Typical Performance Data



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