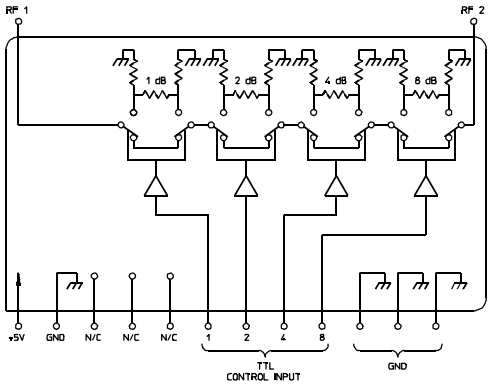
ADS-41V-1000 15 dB DIGITAL ATTENUATOR

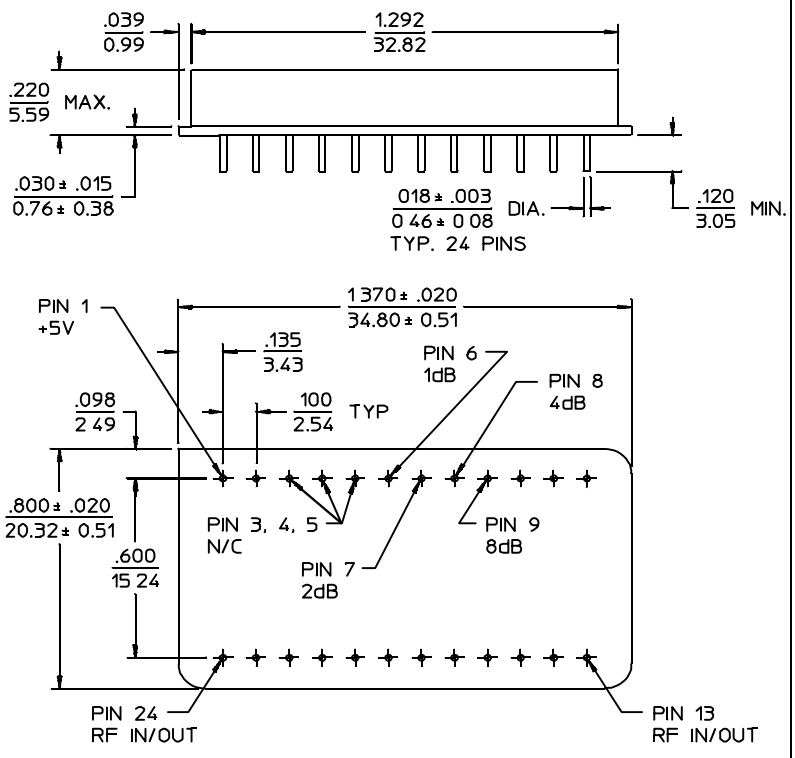
50 to 1500 MHz / 0 to 15 dB in 1 dB Steps / 4-Bit Direct TTL Control / Monotonic / +5V Supply



V Package Outline - 24 pin Dual In Line

TRUTH TABLE				
Attenuation Setting, dB	Control Inputs "6"	"7"	"8"	"9"
Reference	0	0	0	0
1	1	0	0	0
2	0	1	0	0
4	0	0	1	0
8	0	0	0	1

"1" = Logic High TTL
"0" = Logic Low TTL

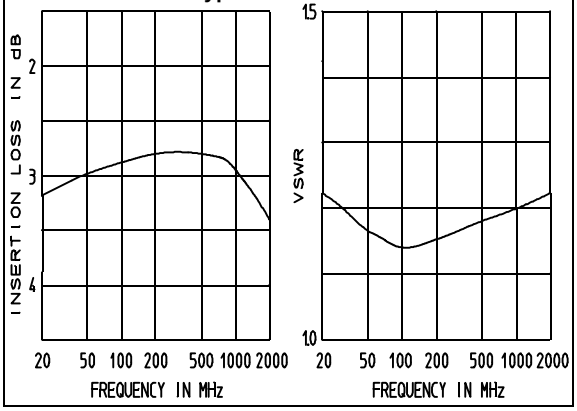


NOTES:
1. Tolerance on 3 place decimals ± .010(.25) except as noted.
2. Dimensions in inches over millimeters.
3. Lead dimensions apply only at body.
4. All unmarked terminals are ground.

GENERAL SPECIFICATIONS

Frequency Range:	50 - 1500 MHz
Attenuation Range:	0 - 15 dB
Minimum Step Size:	1 dB
Attenuation Flatness:	± 0.5 dB/bit max.
	± 1.0 dB max
Attenuation Accuracy:	± 0.5 dB at f_o
Insertion Loss:	4 dB max.
Phase Variation:	± 10° typ.
VSWR:	1.7:1 max.
Impedance:	50 Ω nom.
Switching Delay Time:	2 µs typ.
(50% control transition to 10/90% RF)	
Switching Transients:	20 mV typ.
(50% control transition to 10/90% RF)	
Bias Requirement:	+5 VDC
	@ 80 mA nom.
Input Intercept Point:	+32 dBm typ.
Input Power:	0.25 W max.
Weight, nominal:	0.4 oz (11 g)
Operating Temperature:	– 55° to +85°C

Typical Performance



General Notes:

1. The ADS-41V-1000 is constant impedance, 4-bit digital attenuator covering 50 to 1500 MHz and driven directly by TTL logic. PIN diode switched attenuator pads are activated by Advanced Fact™ C-MOS, TTL compatible logic drivers, allowing high speed operation without need of a negative supply.
2. Careful design of thick film resistive pads and detailed selection of suitable PIN diodes provide a wide bandwidth with minimal phase shift.

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