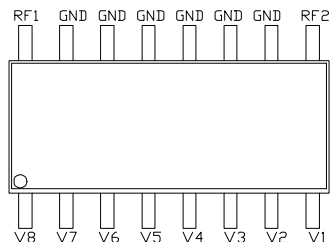


GaAs Digital Attenuator, 5 Bit, 0.5,1,2,4,8 dB DC - 2.0 GHz ITTA503AD

ADVANCED INFORMATION

FEATURES

- 15.5 dB Attenuation Range in 0.5 dB steps
- High attenuation accuracy
- Packaged in a SOIC 16 package



Description

The ITTA503AD is a GaAs FET Digital Attenuator consisting of 5 monolithic attenuators of 0.5, 1, 2, 4, and 8 dB providing a maximum attenuation of 15.5 dB in 0.5 dB steps. Designed for high attenuation accuracy in a low cost SOIC 16 package.

Maximum Ratings (T_A = 25 °C unless otherwise noted)

Rating	Symbol	Value	Unit
RF input power	J _{1,2,3}		
Control Voltage	V _{1,2}		
Junction Temperature	T _J	+150	°C
Storage Temperature	T _{STG}	-40 to +150	°C

APPLICATIONS INCLUDE CELLULAR, RADIO, WIRELESS LANS AND OTHER WIRELESS APPLICATIONS.

ELECTRICAL SPECIFICATIONS AT 25 DEGREES C

Parameter	Frequency	Min.	Typ.	Max.	Unit
Insertion Loss	DC-0.5 GHz		1.1		dB
	DC-1.0 GHz		1.3		dB
	DC-2.0 GHz		1.6		dB
Attenuation Accuracy Per Bit	DC-0.5 GHz DC-1.0 GHz DC-2.0 GHz	(4% or 0.2dB Whichever is greater) (7% or 0.4dB Whichever is greater)			
VSWR	DC-0.5 GHz DC-1.0 GHz DC-2.0GHz		1.3:1 1.5:1 1.7:1		

OPERATING CHARACTERISTICS AT 25 DEGREES C

Parameter	Condition	Freq.	Min.	Typ.	Max.	Unit
Switching Characteristics	Rise, Fall (10/90% or 90/10% RF)			15		nS
	On, Off (50% CTL to 90/10% RF)			30		nS
	Video Feedthru			30		mV
Input Power for 1 dB Compression		0.50-2.0 GHz 0.05 GHz		+27 +20		dBm dBm
Control Voltages	V _{low}			-5.0		Volts
	V _{High}			0.0		Volts

Advanced Information - Specifications Subject to Change Without Notice

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