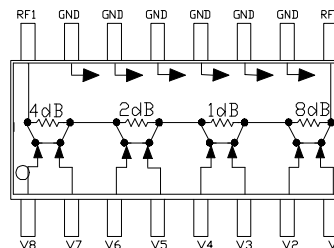


GaAs Digital Attenuator, 4 Bit, 1,2,4,8 dB Dual Control DC - 2.0 GHz ITTA403AD

ADVANCED INFORMATION

FEATURES

- 15 dB Attenuation Range in 1 dB steps
- Dual Control
- High attenuation accuracy
- Packaged in a SOIC 16 package



Description

The ITTA403AD is a GaAs FET Digital Attenuator consisting of 4 monolithic attenuators of 1, 2, 4, and 8 dB providing a maximum attenuation of 15 dB in 1 dB steps. Designed for high attenuation accuracy in a low cost SOIC 16 package.

Maximum Ratings ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Rating	Symbol	Value	Unit
RF input power	$J_{1,2,3}$		
Control Voltage	$V_{1,2}$		
Junction Temperature	T_J	+150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-40 to +150	$^\circ\text{C}$

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	(4% or 0.2dB Whichever is greater) (7% or 0.4dB Whichever is greater)			
	DC-1.0 GHz				
	DC-2.0 GHz				
VSWR	DC-0.5 GHz		1.3:1		
	DC-1.0 GHz		1.5:1		
	DC-2.0GHz		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		0.50-2.5.0 GHz		+27		dBm
		0.05 GHz		+20		dBm
Control Voltages	V_{low}			-5.0		Volts
	V_{High}			0.0		Volts

