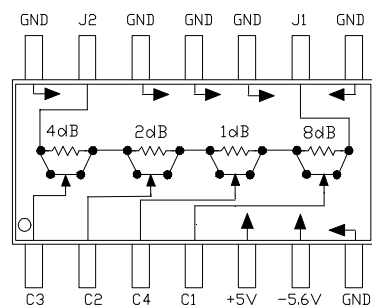


GaAs Digital Attenuator, 4 Bit, 1, 2, 4, 8 dB with Driver DC - 2.0 GHz ITTA402AC

ADVANCED INFORMATION

FEATURES

- 15 dB Attenuation Range in 1 dB steps
- Integral Driver with +5, -5 Supply Voltage
- Packaged in a SOIC 14 package



Description

The ITTA402AC is a 4 Bit 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.

Integral Drivers offer single control of individual bits. DC supply requirements are +5 and -5 Volts. APPLICATIONS INCLUDE CELLULAR, RADIO, WIRELESS LANS AND OTHER WIRELESS APPLICATIONS.

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

ELECTRICAL SPECIFICATIONS AT 25 DEGREES C

Parameter	Frequency	Min.	Typ.	Max.	Unit
Insertion Loss	DC-0.5 GHz		01.7		dB
	DC-1.0 GHz		2.2		dB
	DC-2.0 GHz		3.1		dB
Attenuation Accuracy Per Bit	DC-0.5 GHz DC-1.0 GHz DC-2.0 GHz	(7% of 0.25dB Whichever is greater) (10% or 0.5dB 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		0.50-2.5.0 GHz 0.05 GHz		+24 +16		dBm dBm
Control Voltages	V _{low}		0.0		0.2	Volts
	V _{High}		4.0		5.0	Volts
Supply Voltages	+5.0V ± 0.5V @ 4mA Typical		4.5		5.5	Volts
	-5.0V ± 0.2V @ 12mA Typical		-5.4		-5.8	Volts

Advanced Information - Specifications Subject to Change Without Notice

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