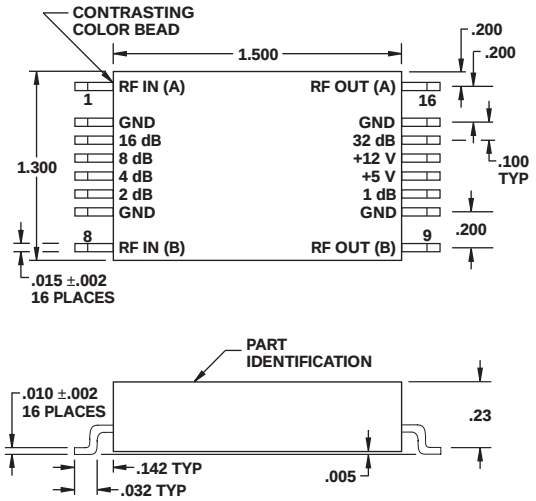
HDI

FEATURES

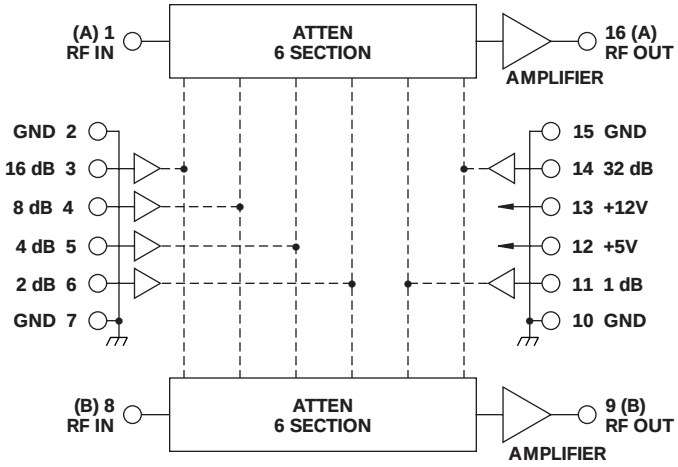
- **Total Integration of GaAs MMIC Attenuators, Silicon MMIC Amplifiers, and TTL Drivers**
- **Ultra Small 1.3 x 1.5 Surface Mount Package**
- **Phase and Amplitude Balance Channel to Channel**

MODEL NO. DA0900

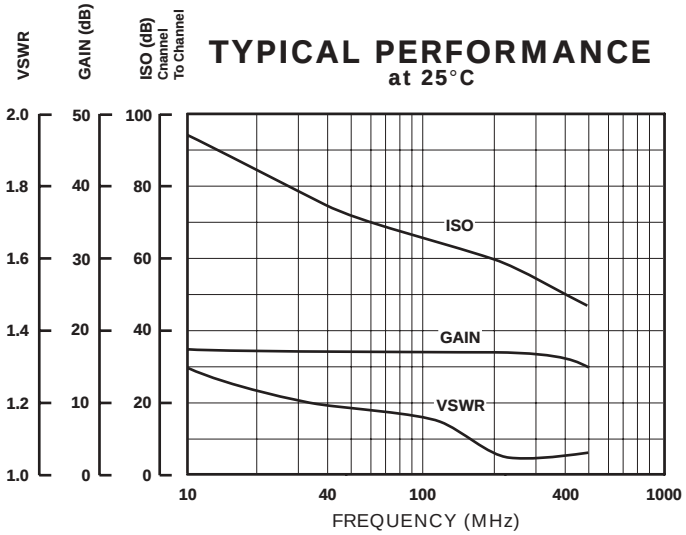
Dual Attenuator / Amplifier



.xx = .02
.xxx = .010



TYPICAL PERFORMANCE at 25°C



GUARANTEED PERFORMANCE

Parameter	Min	Typ	Max	Units	Conditions
Operating Frequency	20		300	MHz	
DC Current		3	10	mA	At +5 VDC Supply
		34	50	mA	At +12 VDC Supply
Control Type		TTL			6 Line
					Logic "0" = Thru
					Logic "1" = Attenuation
Control Current *High*		0	±40	µA	VIH = +2.7V
Low		0	±40	µA	VIL = +0.5V
Insertion Gain	14	16	20	dB	
Noise Figure		7	10	dB	
Isolation *Channel to Channel*	60	66		dB	20 - 100 MHz
	40	54		dB	100 - 300 MHz
Phase Vs. Attenuation		±6	±10	DEG	
Balance		±2	±5	DEG	Channel to Channel
Attenuation *LSB*		1		dB	
Range	0		63	dB	1, 2, 4, 8, 16, 32
Accuracy				dB	±(0.25 dB ±2% of Atten. Setting in dB)
Balance		0.2	±0.5	dB	Channel to Channel
VSWR		1.2/1	1.4/1		
Impedance		50		OHMS	
Switching Speed		36	50	nSec	50% TTL to 90% / 10% RF
Transition (Rise/Fall) Time		20		nSec	90% / 10% or 10% / 90% RF
RF Power *Operate*		+5	+0	dBm	0.1 dB Compression
No Damage			+20	dBm	
Operating Temperature	-55	+25	+85	°C	TA