


**HT1001**

## General Description

The HT1001 is a TTL-controlled 5-BIT attenuator in a low cost SMA package. Covering 1 MHz to 1000 MHz, the typical insertion loss is less than 2.0 dB. The attenuator offers a total attenuation range of 31 dB with 1 dB step size. The attenuator operates with a single voltage of -5V.

The attenuation steps are controlled by TTL signals.

The device operates from  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ .

## Electrical Performance

Typical Data @25 °C

Parameter	Min	Typ	Max	Units
Frequency Range	1		1000	MHz
Insertion Loss		2.0	2.5	dB
Attenuation Range		31		dB
Attenuation Steps		1		dB
Return Loss "All Attenuation States"	10	13		dB
Return Loss "Off State"	9	12		dB
Input $P_{0.1\text{dB}}$		22		dBm
Switching 10/90% RF		300		ns
Temperature Range	-40		+85	$^{\circ}\text{C}$
DC Voltage		$-5.0 \pm 10\%$		V
Control Voltages		0/5		V
Package	M101-2			
Size	55 x 32 x 11			mm

Rev. 1.0