



# CHIP ATTENUATORS

The T pad attenuator is used to reduce microwave signals while maintaining an impedance match. Piconics T pad attenuators are usable to 20 GHz with modest degradation in electrical characteristics at increased frequency. The thin film design yields superior characteristics at high frequencies and provides high reliability over the broadest range of operating conditions.

ELECTRICAL CHARACTERISTICS						
ATTEN. dB	DC 4 GHZ		4-8 GHZ		8-12 GHZ	
	VSWR MAX	ATTEN TOL dB	VSWR MAX	ATTEN TOL dB	VSWR	ATTEN TOL dB
1	1.25	+/-0.3	1.5	+/-0.5	1.7	+/-0.5
2	1.25	+/-0.3	1.5	+/-0.5	1.7	+/-0.5
3	1.25	+/-0.3	1.5	+/-0.5	1.5	+/-0.5
4	1.25	+/-0.3	1.5	+/-0.5	1.5	+/-0.5
5	1.25	+/-0.5	1.5	+/-0.5	1.5	+/-0.5
6	1.25	+/-0.5	1.5	+/-0.5	1.5	+/-0.5
7	1.25	+/-0.5	1.5	+/-0.5	1.5	+/-0.5
8	1.25	+/-0.5	1.5	+/-0.5	1.5	+/-0.5
9	1.25	+/-0.8	1.5	+/-0.8	1.5	+/-0.8
10	1.25	+/-0.8	1.5	+/-0.8	1.7	+/-0.8
11	1.25	+/-1.0	1.5	+/-0.8	1.7	+/-0.8
12	1.25	+/-1.0	1.5	+/-0.8	1.7	+/-0.8
13	1.25	+/-1.0	1.7	+/-0.2	2.0	+/-1.0
14	1.25	+/-1.0	1.7	+/-0.2	2.0	+/-1.0
15	1.25	+/-1.0	1.7	+/-0.3	2.0	+/-1.0
16	1.25	+/-1.0	1.7	+/-0.3	2.0	+/-1.0
17	1.25	+/-1.0	1.7	+/-0.4	N/A	+/-1.5
18	1.25	+/-1.0	1.7	+/-0.4	N/A	+/-1.5
19	1.25	+/-1.0	1.7	+/-0.5	N/A	+/-1.5
20	1.25	+/-1.0	1.7	+/-0.5	N/A	+/-1.5

❑ **FEATURES:**

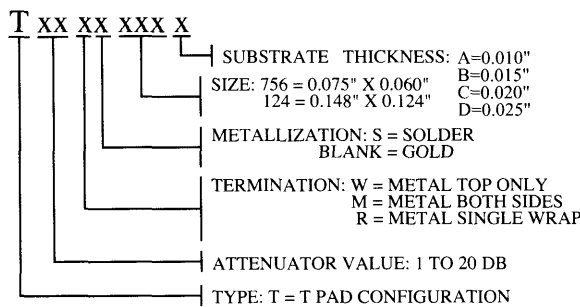
- Thin film
- Laser trimmed-scan cut
- Small sizes - 0.075 x 0.060 or 0.148 x 0.124
- D.C. to 20 GHz
- Low VSWR
- Temperature stable +/- 100 PPM
- High Dissipation Capacity
- Meets MIL-STD-833 M2032 Level B
- Available in Beryllia for higher power
- Operating temperature: -55 deg. C to +150 deg. C
- Characteristic impedance: 50 Ohms
- Custom designs available

❑ **SPECIFICATIONS:**

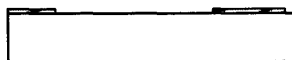
- **SUBSTRATE:** 99.6% Alumina or Beryllia for higher power.
- **CONDUCTOR:** Gold over Nickel Barrier for wire bonding and welding, or pre-tined SN63 for soldering.
- **RESISTOR:** Tantalum nitride
- **POWER:**

Size type	Alumina	Beryllia
T756	500 mw	1W
T124	1 w	2W

**PART NUMBER CODE:**



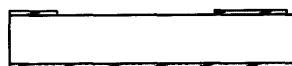
SIDE VIEW OF VARIOUS TERMINATIONS



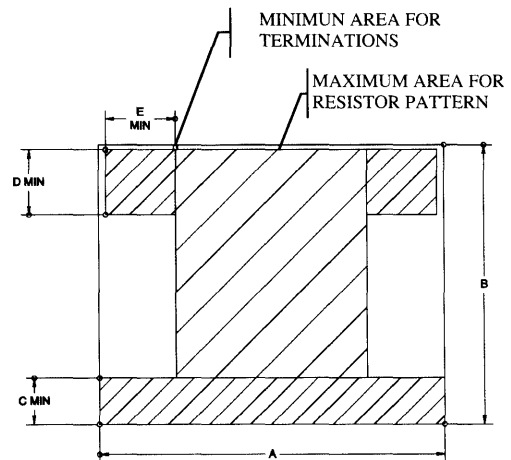
"W" OR "O" TERMINATION  
FRONT SIDE METAL ONLY



"R" OR "B" TERMINATION  
FRONT & BACK SIDE METAL  
WRAPAROUND ON SHUNT  
CONNECTION ONLY



"M" TERMINATION  
FRONT & BACK SIDE METAL  
NO WRAPAROUND



DIMENSIONS IN INCHES

TYPE	A	B	C	D	E
T756	0.075"	0.060"	0.010"	0.015"	0.0150"
T124	0.148"	0.120"	0.020"	0.028"	0.030"