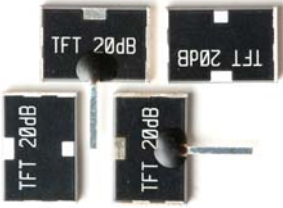




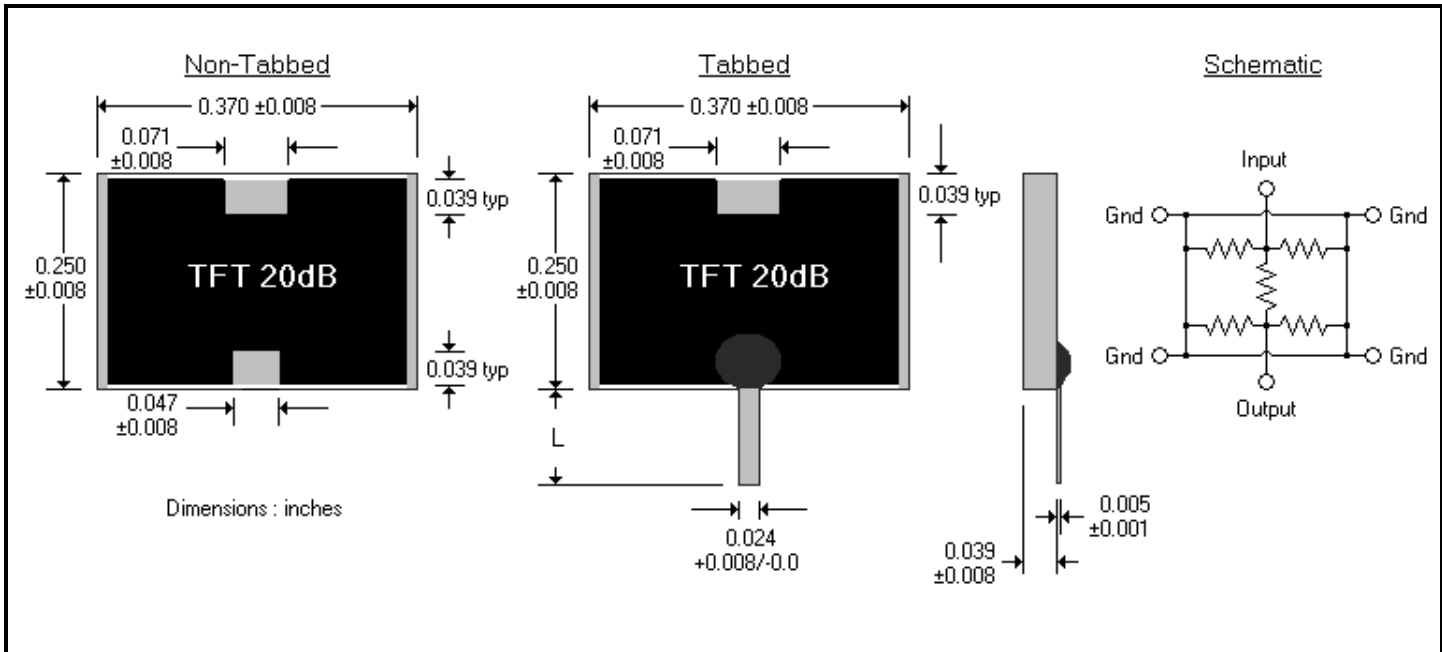
Product Family: [High Power Chip Attenuators](#)

Part Number Series: [HPA Series](#)

	<p>Construction:</p> <ul style="list-style-type: none"> • Alumina Nitride Substrate • Ni alloy thin-film resistive elements • 100% silver finish terminations (RoHS compliant and Pb Free) 	<p>Features:</p> <ul style="list-style-type: none"> • 3725 English case size • 100W power rating • 20dB and 30dB attenuation values • ± 0.7dB attenuation tolerance • 50Ω impedance • High volume production suitable for commercial and special applications
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Surface mount thin film attenuator on Aluminum Nitride substrate providing excellent attenuation of transmitted signals for high power RF and microwave frequencies with optimal thermal dissipation. Balanced circuit design provides excellent frequency characteristics with tight tolerance behavior. Useful for evolving applications that require attenuation of transmitted signals verses just terminating them. This chip power attenuator provides matching to existing components in a system allowing for the filtering of harmonics while maintaining the cost performance of typical termination resistors. This chip power attenuator allows you to offer isolators with specific input impedances to closely match your customers' circuitry.

Product Dimensions and Schematic:



HPA Series Part Numbering: Ex: HPA3725C20DBL2

Product Designator	English Size	Impedance Code	Attenuation Value	Tab Length (L)
HPA	3725	C = 50Ω	20dB 30dB	L0 = No Tab L1 = 0.110" L2 = 0.216"

Electrical Specifications:

Type	HPA3725
English Size	3725
Metric Size	9463
Frequency Range	DC to 2.5 GHz
VSWR	1.25:1 max (0.4 ~ 2.5GHz)
Rated Input Power	100 Watts
Attenuation (dB)	20 dB 30 dB
Attenuation Tolerance (dB)	±0.7 dB
Impedance (code)	50Ω (C)
DC Resistance (between input/output lead and GND)	51Ω ±1.5Ω
Operating Temperature	-55°C to 100°C
Packaging	Trays (100 pcs/tray)

Recommended Soldering Profile:

Profile Feature	Pb-Free Assembly
Average Ramp-Up Rate ($T_{S_{max}}$ to T_p)	3 °C/second max.
Preheat	
- Temperature Min ($T_{S_{min}}$)	150 °C
- Temperature Max ($T_{S_{max}}$)	200 °C
- Time ($t_{S_{min}}$ to $t_{S_{max}}$)	60-180 seconds
Time maintained above:	
- Temperature (T_L)	217 °C
- Time (t_L)	60-150 seconds
Peak Temperature (T_p)	280 +0 °C
Time within 5 °C of actual Peak	
Temperature (t_p)	20-40 seconds
Ramp-Down Rate	6 °C/second max.
Time 25 °C to Peak Temperature	8 minutes max.

