AmpliTech

"Amplify Your Potential"

SURFACE MOUNT AMPLIFIERS

DESCRIPTION

AmpliTech's Surface Mount Amplifiers meet todays demands for smaller, lighter, surface-mount applications. These devices are available in ceramic and metal-wall packages. In order to address the growing need for high volume, high performance, low cost manufacturing, we also offer these amplifiers in thermally efficient BGA packages. Hermetically sealed packages are also provided for better shielding and overall reliability. The AmpliTech package saves board space and board weight while still providing high reliability and excellent heat dissipation. These devices are rugged enough to withstand the toughest vibration and shock characteristics of the Aerospace and Avionics industry.

These amplifiers are ideal for Military, Commercial, Aerospace, SMD, Avionics, High Speed Instrumentation, Cable Communications, Fiber Optics Systems, Satellite Applications, and other high performance, high reliability systems.

AmpliTech is very competitive and will provide you with the best prices and customer service. Our goal is to offer the best quality amplifier available and we show this by offering a standard 3 year warranty on all our amplifiers.

FEATURES

- Space saving, low profile design
- Designs up to 20 GHz
- BGA interface
- Internal regulator and reverse voltage protection
- Flexible designs for custom solutions
- High reliability
- Industry standard packages

OPTIONS

- Custom designs for all specifications
- Input power protection
- Temperature compensation
- Connectorized options
- Designs for cryogenic cooling
- Higher dynamic range
- Specialized MIL-STD 883 and Space Level screening

SURFACE MOUNT AMPLIFIER SPECIFICATIONS

MODEL NUMBER	FREQ. RANGE (GHz)	GAIN (dB, Min.)	GAIN FLATNESS (dB, Max.)	NOISE FIGURE (dB, Max.)	VSWR INPUT (Max.)	VSWR OUTPUT (Max.)	P1dB (dBm, Min.)	NOM. DC POWER (+15 V, mA)	AmpliTech OUTLINE DRAWING
APTSM1-00050100-1820	.05–1	13	± 1.00	1.80*	2.0 :1	2.0 :1	20	150	SM1
APTSM1-00100200-1616	.1–2	12	± 1.00	1.60	2.0 :1	2.0 :1	16	80	SM1
APTSM2-00100200-1208	.1–2	22	± 1.00	1.20	2.0 :1	2.0 :1	8	80	SM1
APTSM2-00100300-1208	.1–3	20	± 1.00	1.20	2.0 :1	2.0 :1	8	80	SM1
APTSM2-00100400-1808	.1–4	20	± 1.00	1.80	2.0 :1	2.0 :1	8	80	SM1
APTSM2-00100600-2208	.1–6	20	±1.50	2.20	2.0 :1	2.0 :1	8	80	SM1
APTSM3-00502000-5008	.5–20	16	±2.75	5.00	2.5:1	2.5 :1	8	100	SM1
APTSM2-00500100-0808	.5–1	25	± 1.00	0.80	2.0 :1	2.0 :1	8	80	SM1
APTSM1-01000200-1618	1–2	13	± 1.00	1.60	2.0 :1	2.0 :1	18	150	SM1
APTSM2-01000200-0808	1–2	25	± 1.00	0.80	2.0 :1	2.0 :1	8	80	SM1
APTSM2-02000400-1008	2–4	21	± 1.00	1.00	2.0 :1	2.0 :1	8	80	SM1
APTSM2-02000600-1208	2–6	20	± 1.00	1.20	2.0 :1	2.0 :1	8	80	SM1
APTSM3-02001800-4008	2–18	18	±2.75	4.00	2.5:1	2.5 :1	8	100	SM1
APTSM2-02002000-7019	2–20	12	±2.75	7.00	2.5 :1	2.5 :1	19	200	SM1
APTSM2-04000800-2008	4–8	20	± 1.00	2.00	2.0 :1	2.0 :1	8	100	SM1
APTSM2-08001200-1508	8–12	20	± 1.00	1.50	2.0 :1	2.0 :1	8	100	SM1
APTSM3-12001800-2008	12–18	20	± 1.00	2.00	2.0 :1	2.0 :1	8	125	SM1

* Noise figure degrades below 200 MHz.

Noise figures increase below 500 MHz in bands wider than .1-10 GHz.

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