

Features

- Ultra High Linearity
- High Gain: 38.5 dB
- Low Noise Figure: 3.7 dB
- Operation Over a Wide Voltage Range

Product Image



Description

The PAW1027 linear power amplifier is a discrete hybrid design, which uses thick film solder manufacturing processes for accurate performance and high reliability. The design has 2 gain stages, using a push pull cascode circuit configuration. Performance is very linear over a broadband frequency range, making it particularly suited for CATV, and commercial & military radio applications.

Electrical Specifications: Freq. = 35 - 350 MHz, $Z_0 = 75 \Omega$, $V_{CC} = +24 V_{DC}$ Nominal

Parameter	Units	Typical	Guaranteed
		25°C	0°C to +70°C
Power Gain (min./max.)	dB	38.5	37.0 / 40.0
Gain Flatness (max.) f = 40 - 350 MHz	dB	0.4	0.6
Input / Output Return Loss (min.) f = 50 - 350 MHz	dB	18	14
Composite Triple Beat (CTB) 60 channels flat $V_{OUT} = +46$ dBmV	dB	-59	—
Cross Modulation (XMOD) 60 channels flat $V_{OUT} = +46$ dBmV	dB	-59	—
Second Order IMD 2 tone $V_{OUT} = +46$ dBmV $f_1 = 50$ MHz, $f_2 = 350$ MHz	dB	-64	—
Noise Figure (max.) f = 350 MHz	dB	3.7	5.0
Total Current (max.)	mA	300	340

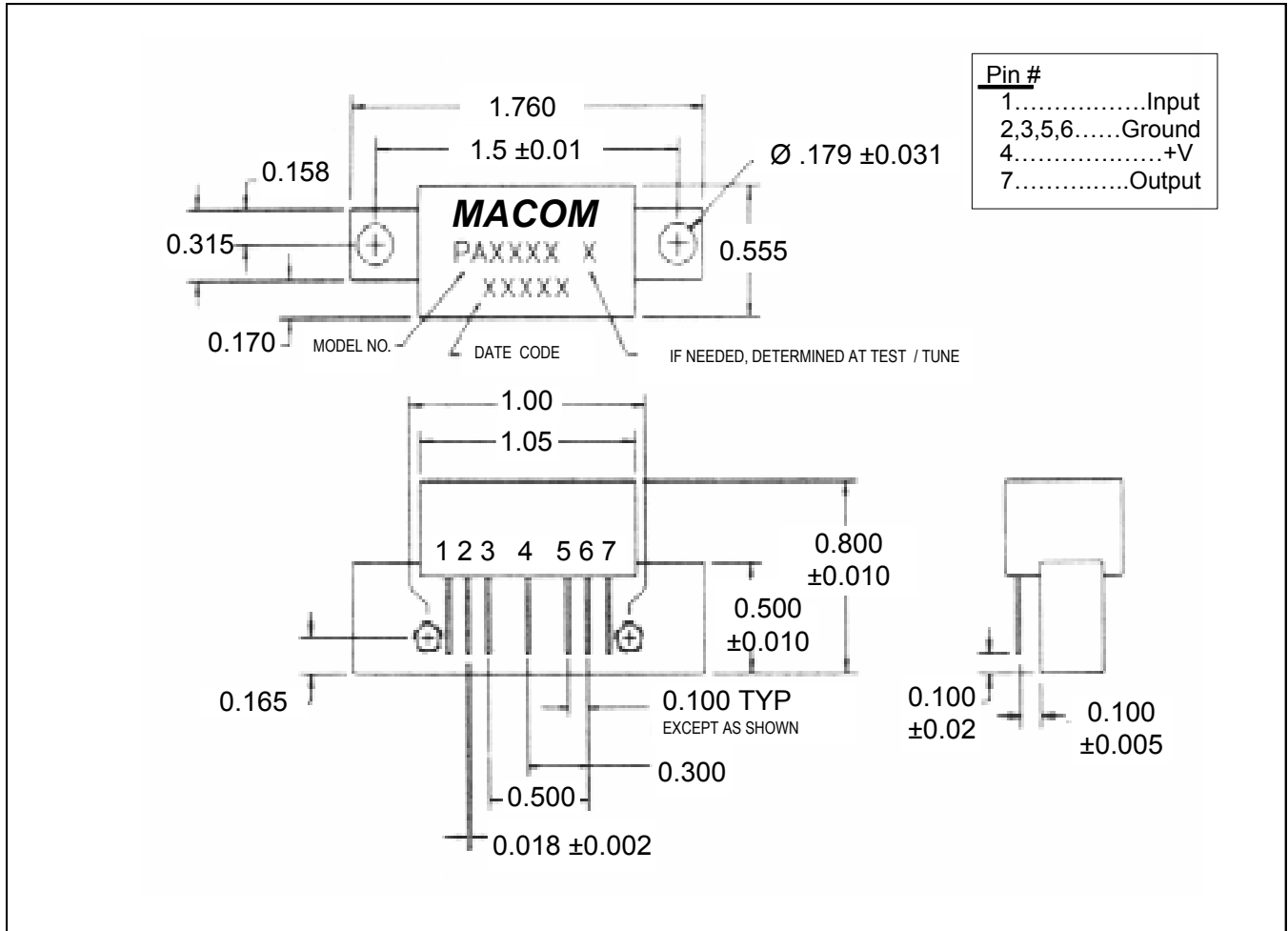
Ordering Information

Part Number	Package
PAW1027	SOT115J

Absolute Maximum Ratings

Parameter	Absolute Maximum
Storage Temperature	-40°C to +85°C
Operation Base Temperature	+70°C
RF Input Voltage	14 dBm
DC Voltage	28 volts

Outline Drawing: SOT115J*



* Dimensions are inches ±0.015 unless otherwise specified.

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