



RF/Microwave Amplifier

Available as:

TM6270, 4 Pin TO-8 (T4) TN6270, 4 Pin 0.450" Sq. Surface Mount (SM3) BX6270, SMA Connectorized Housing (H1)



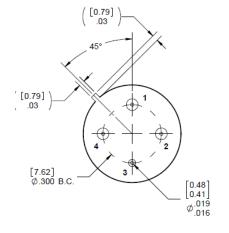
Features

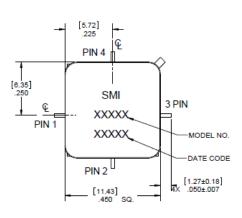
- Low Noise Figure: 1.5 dB
- Environmental Screening Available
- Unconditionally Stable
- No External Circuitry Needed

Technical Specifications

| Characteristic | | TYPICAL Ta = +25 °C | MIN/MAX Ta = -55°C to +85 °C |
|--------------------------|-----|------------------------|---------------------------------|
| Frequency | | 1200 – 1700 MHz | 1200 – 1700 MHz |
| Gain (dB) | | 16 | 15 Min. |
| Power @ 1 dB Comp. (dBm) | | +13 | +11 Min. |
| Reverse Isolation (dB) | | -20 | |
| VSWR | In | 1.5:1 | 2.0:1 Max. |
| | Out | 1.5:1 | 2.0:1 Max. |
| Noise Figure (dB) | | 1.5 | 2.5 Max. |
| Power | Vdc | +15 | +15 |
| | mA | 35 | 45 Max. |

- 1) Care should always be taken to effectively ground the case of each unit
- 2) Typical values are measured at 25°C, but not guaranteed.
- 3) Package drawings below are for reference only.





Typical Intermodulation Performance at 25 °C

| Second Order Harmonic Intercept Point: | +40 dBm (Typ.) |
|---|----------------|
| Second Order Two Tone Intercept Point: | +36 dBm (Typ.) |
| Third Order Two Tone Intercept Point: | +27 dBm (Typ.) |

Note: Measured at 1500 MHz at 25C.

Absolute Maximum (No Damage) Ratings

| Operating Temperature | -55°C to +100 °C |
|------------------------------|---------------------------|
| Storage Temperature | -62°C to +125°C |
| Case Temperature | +125 °C |
| DC Voltage | +17 Volts |
| Continuous RF Input Power | +13 dBm |
| Maximum Peak Power | 0.5 Watt (3 μsec Max.) |

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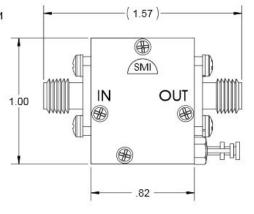
Instructions

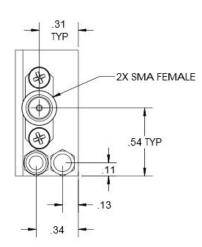
| Grounding Instructions | Care should be taken to effectively ground each unit. | |
|---|--|--|
| Revisions | API reserves the right to make revisions to both product and/or the information contained within their datasheets without advanced notice. | |
| Min./Max. Values | Specifications are guaranteed when tested in a 50 Ω (ohm) system. | |
| Typical performance graphs and values are measured at 25°C, but not guaranteed. | | |

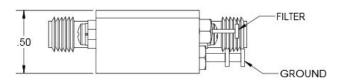
1) Outlines drawings below are for reference only.

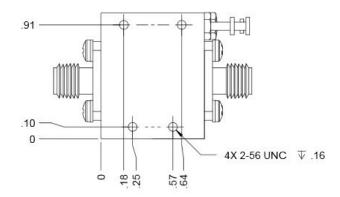
NOTES:

- HOUSING: ALUMINUM FINISH: NICKEL









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