

## Low Noise RF Amplifier

- \* Operating Frequency : 20-500 MHz
- \* Linear Power : +27 dBm
- \* Noise Figure : 1.6 dB
- \* Gain : 41 dB



### Description:

#### ELECTRICAL SPECIFICATION @ VDD= +15VDC; Temp. = 25°C, 50Ω System

| Parameter                        | Symbol     | Min | Typ       | Max       | Unit  |
|----------------------------------|------------|-----|-----------|-----------|-------|
| Operating Frequency              | BW         | 20  |           | 500       | MHz   |
| Gain                             | G          | 39  | 41        |           | dB    |
| Gain Flatness                    | $\Delta$ G |     | $\pm 0.3$ | $\pm 0.5$ | dB    |
| Reverse Isolation                | S 12       |     | -50       |           | dB    |
| Noise Figure                     | NF         |     | 1.6       | 2.4       | dB    |
| Power Output P1dB                | P1dB       | 25  | 27        |           | dBm   |
| Output 3rd Order Intercept Point | OIP3       | 38  | 42        |           | dBm   |
| VSWR in/out                      | S11/S22    |     | 1.6 :1    | 2.0 :1    | Ratio |
| Operating Voltage                | Vdc        |     | 15        |           | Volt  |
| Operating Current                | Id         |     | 320       | 350       | mA    |

#### MECHANICAL SPECIFICATION

| Parameter            | Description | Limits | Units |
|----------------------|-------------|--------|-------|
| Dimension            | 2.5x1x.5    |        | in    |
| RF Connectors IN/OUT | SMA-F       |        |       |
| DC Connector         | Filtered DC |        |       |
| Cooling              | None        |        |       |

#### PROTECTIONS

|                             |             |  |
|-----------------------------|-------------|--|
| RF Input Power              | + 5 dBm Max |  |
| Reverse Polarity Protection | Optional    |  |
| Load VSWR                   |             |  |
| Stability                   | 100%        |  |

#### ENVIROMENTAL CHARACTERISTICS

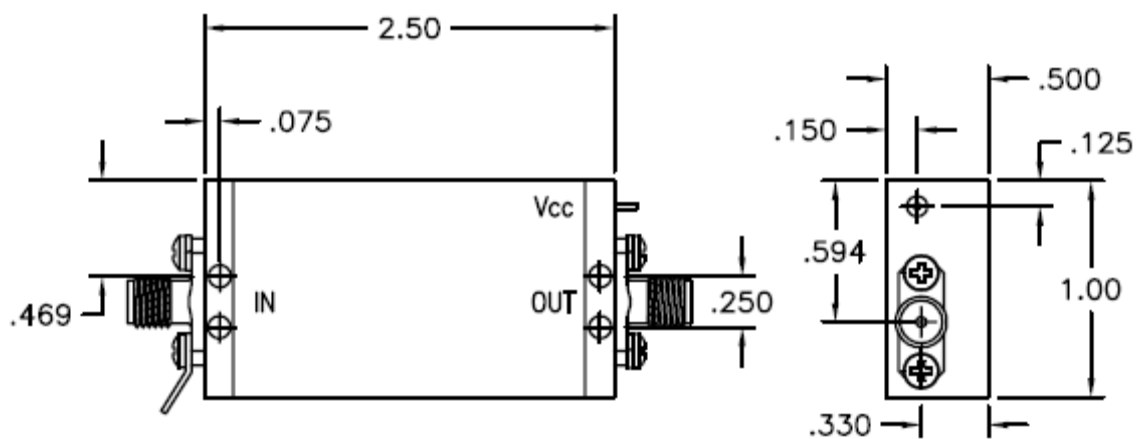
| Parameter                  | Symbol | Min. | Typ. | Max.  | Units |
|----------------------------|--------|------|------|-------|-------|
| Operating Case Temperature | Tc     | 0    |      | 50°C  | °C    |
| Storage Temperature        | Tstg   | -40  |      | 100°C | °C    |

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## Outline Drawing



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