



TELEDYNE MICROWAVE SOLUTIONS

Everywhere you look™

Thin-Film Cascadable Amplifier 5 to 500 MHz

Technical Data

UTO/UTC 511 Series

Features

- **Frequency Range:** 5 to 500 MHz
- **Low Noise:** 2.3 dB (Typ)
- **Temperature Compensated**
- **Low Supply Current:** 10 mA (Typ)

Applications

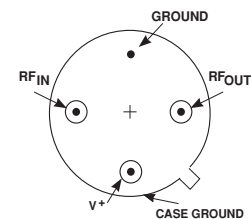
- IF/RF Amplification

Description

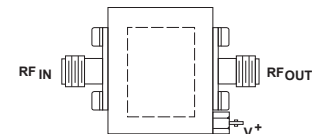
The 511 Series is an efficient medium-gain thin-film bipolar RF amplifier. Resistive feedback and active bias provide temperature compensation and increased immunity to bias voltage variations. Blocking capacitors couple the RF through the amplifier. The 511 Series is available in either the TO-8 hermetic case or connected TC-1A package.

Pin Configuration

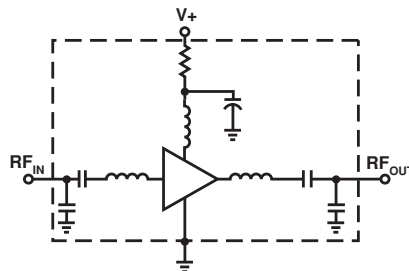
UTO—TO-8U



UTC—TC-1A



Schematic



Maximum Ratings

Parameter	Maximum
DC Voltage	+17 Volts
Continuous RF Input Power	+13 dBm
Operating Case Temperature	-55 to +125°C
Storage Temperature	-62 to +150°C
"R" Series Burn-In Temperature	+125°C

Thermal Characteristics¹

θ_{JC}	105°C/W
Active Transistor Power Dissipation	67 mW
Junction Temperature Above Case Temperature	7°C
MTBF (MIL-HDBK-217E, A_{UF} @ 90°C)	924,700 Hrs.

Weight: (typical) UTO—2.1 grams; UTC—21.5 grams

TC-1A

