



Thin-Film Cascadable Amplifier 10 to 400 MHz

Technical Data

UTO/UTC 440 Series

Features

- **Frequency Range: 10 to 400 MHz**
- **Low Current Drain: 15 mA (Typ)**
- **Medium Gain: 13 dB (Typ)**
- **Temperature Compensated**
- **High Efficiency**

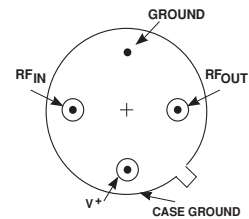
Applications

- **IF/RF Amplification**
- **Low Power Systems**

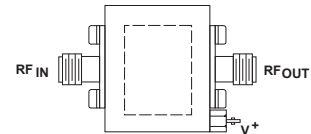
Description

The 440 Series is a medium-gain bipolar RF amplifier built on a thin-film substrate using output transformer coupling to increase efficiency. Blocking capacitors couple the RF through the amplifier. The 440 Series is available in either the TO-8 hermetic case or connected TC-1A package.

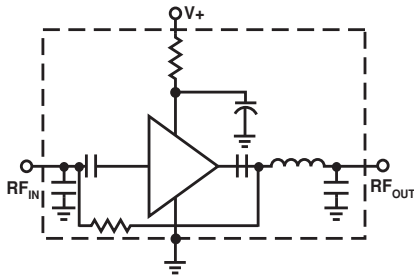
Pin Configuration UTO—TO-8T



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	114 mW
Junction Temperature Above Case Temperature	12°C
MTBF (MIL-HDBK-217E, A_{UF} @ 90°C)	526,724 Hrs.

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

TC-1A

