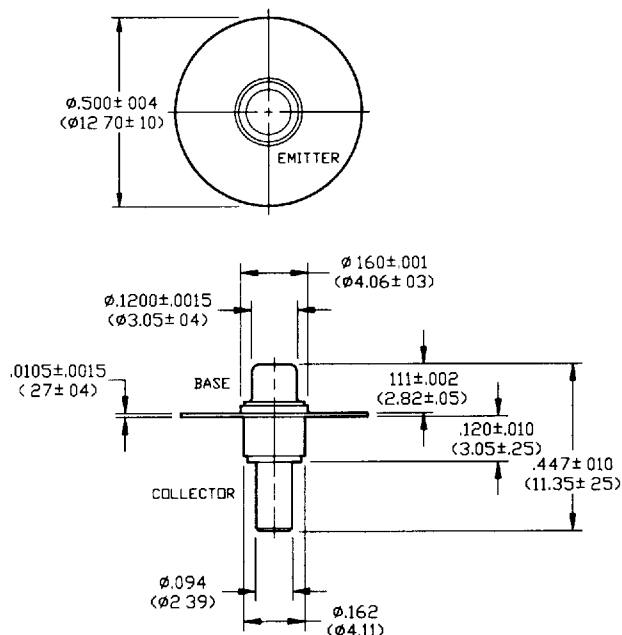




Features

- NPN Silicon Microwave Power Transistor
- Common Emitter Configuration
- Designed for S-Band Applications
- Interdigitated Geometry
- Diffused Emitter Ballasting Resistors
- Gold Metallization System
- Hermetic Metal/Ceramic Package
- For Coaxial, Stripline, and Lumped Elements Circuits

Outline Drawing



UNLESS OTHERWISE NOTED, TOLERANCES ARE INCHES ± 0.005 "
(MILLIMETERS ± 0.13 MM)

Absolute Maximum Ratings at 25°C

Parameter	Symbol	Rating	Units
Collector-Base Voltage	V_{CBO}	40	V
Collector-Emitter Voltage	V_{CEO}	14.0	V
Collector Current (Peak)	I_C	0.22	A
Power Dissipation	P_D	8.5	W
Junction Temperature	T_J	200	°C
Storage Temperature	T_{STG}	-65 to +200	°C

Electrical Characteristics at 25°C

Parameter	Symbol	Min	Max	Units	Test Conditions
Collector-Base Breakdown Voltage	BV_{CBO}	40	-	V	$I_C = 100 \mu A$
Collector-Emitter Breakdown Voltage	BV_{CEO}	14	-	V	$I_C = 500 \mu A$
Collector-Base Leakage Current	I_{CBO}	-	1.0	μA	$V_{CB} = 36 V$
Thermal Resistance	$R_{TH(JC)}$	-	20	°C/W	$V_{CC} = 28 V$, $F = 2.0 GHz$, $P_{OUT} = 1.0 W$
Collector-Base Capacitance	C_{ob}	2.0	-	pF	$f = 1 MHz$, $V_{CE} = 30 V$
Power Output	P_{OUT}	1.0	-	W	$V_{CC} = 28 V$, $F = 2.0 GHz$
Collector Efficiency	η_C	24	-	%	$V_{CC} = 28 V$, $F = 2.0 GHz$
Oscillation Frequency	f_{OSC}	2.0	2.2	GHz	$V_{CC} = 28 V$

Impedance and Matching Circuitry Information Available on Request