

NPN EPITAXIAL SILICON RF TRANSISTOR CHIP (BLH3355)

Description

- NPN epitaxial silicon RF transistor for microwave low-noise amplification

Features

- Low noise and high gain bandwidth product
- High power gain

Applications

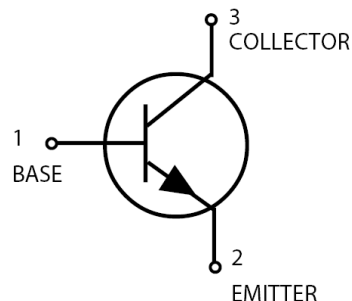
- UHF / VHF wide band amplifier

Structure

- Planar type
- Electrodes: Aluminum alloy
- Backside metal: Au alloy

Size

- Chip size: 370 μ m $\times$ 370 μ m
- Chip thickness: 220 $\pm$ 20 μ m.
- Pad size: ϕ 100 μ m



ABSOLUTE MAXIMUM RATING

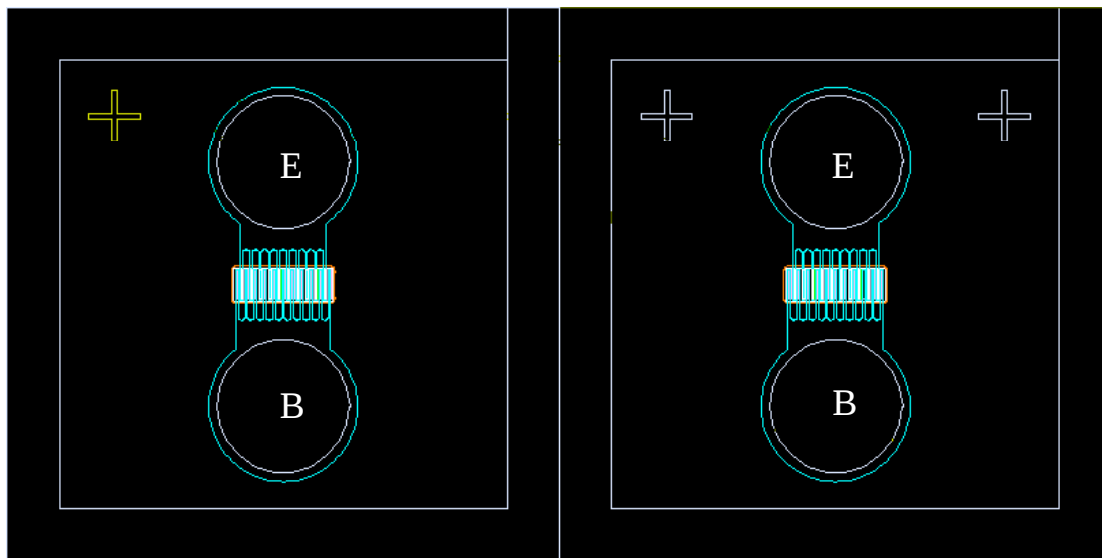
Symbol	Parameter	Value	Unit
V_{CBO}	Collector to Base Voltage	20	V
V_{CEO}	Collector to Emitter Voltage	12	V
V_{EBO}	Emitter to Base Voltage	3.0	V
I_C	Collector Current	100	mA
P_{tot}	Total Power Dissipation	200	mW
T_j	Junction Temperature	150	$^{\circ}$ C
T_{sta}	Storage Temperature	-65 to +150	$^{\circ}$ C

ELECTRICAL CHARACTERISTICS

$T_j = 25^{\circ}$ C unless otherwise specified

Symbol	Parameter	Test conditions	Min.	Typ.	Max.	Unit
I_{CBO}	Collector Cut-off Current	$V_{CB}=10V, I_E=0mA$	-	-	1.0	μ A
I_{EBO}	Emitter Cut-off Current	$V_{EB}=1.0V, I_C=0mA$	-	-	1.0	μ A
h_{FE}	DC Current Gain	$V_{CE}=10V, I_C=20mA$	50	120	250	nA

PATTERN DRAWING



(0.8 μ m design)

(0.6 μ m design)