

## 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

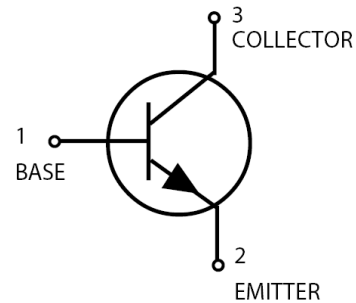
- UHF / VHF wide band amplifier

### Structure

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

### Size

- Chip size: 370 $\mu$ m x 370 $\mu$ m
- Chip thickness: 220 $\pm$ 20 $\mu$ m.
- Pad size:  $\phi$ 100 $\mu$ m



## ABSOLUTE MAXIMUM RATING

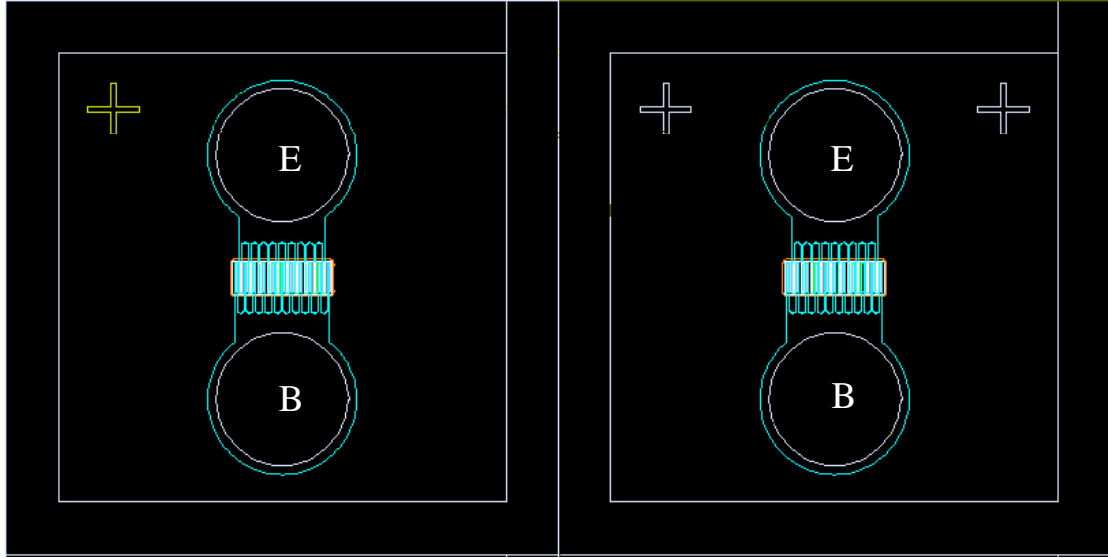
Symbol	Parameter	Value	Unit
$V_{CBO}$	Collector to Base Voltage	20	V
$V_{CEO}$	Collector to Emitter Voltage	12	V
$V_{EBO}$	Emitter to Base Voltage	3.0	V
$I_C$	Collector Current	100	mA
$P_{tot}$	Total Power Dissipation	200	mW
$T_j$	Junction Temperature	150	$^{\circ}$ C
$T_{sta}$	Storage Temperature	-65 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	$\mu$ A
$I_{EBO}$	Emitter Cut-off Current	$V_{EB}=1.0V, I_C=0mA$	-	-	1.0	$\mu$ A
$h_{FE}$	DC Current Gain	$V_{CE}=10V, I_C=20mA$	50	120	250	nA

PATTERN DRAWING



(0.8 $\mu$ m design)

(0.6 $\mu$ m design )