

<Transistor>

# 2SC4155A

For Low Frequency Amplify Application  
Silicon NPN Epitaxial Type (Super Mini type)

## DESCRIPTION

2SC4155A is a super mini package resin sealed silicon NPN epitaxial type transistor. It is designed for low frequency voltage amplify application.

## FEATURE

- Small collector to emitter saturation voltage  $V_{CE(sat)}=0.3V$  max
- Excellent lineality of DC forward current gain
- Super mini package for easy mounting

## APPLICATION

For hybrid IC, small type machine low frequency voltage amplify application.

## MAXIMUM RATINGS (Ta=25°C)

Symbol	Parameter	Rating	Unit
V <sub>CB0</sub>	Collector to Base voltage	50	V
V <sub>EB0</sub>	Emitter to Base voltage	6	V
V <sub>CE0</sub>	Collector to Emitter voltage	50	V
I <sub>C</sub>	Collector current	200	mA
P <sub>C</sub>	Collector dissipation (Ta=25°C)	150	mW
T <sub>J</sub>	Junction temperature	+125	°C
T <sub>stg</sub>	Storage temperature	-55to+125	°C

## ELECTRICAL CHARACTERISTICS (Ta=25°C)

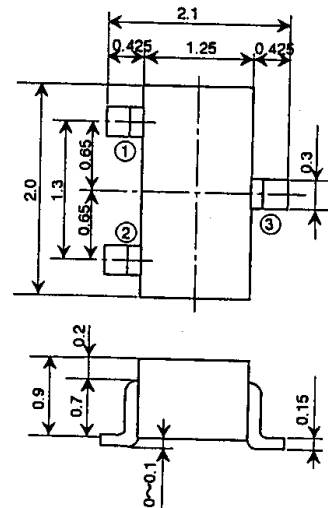
Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
V <sub>(BR)CEO</sub>	C to E break down voltage	I <sub>C</sub> =100μA, R <sub>BE</sub> =∞	50			V
I <sub>CBO</sub>	Collector cut off current	V <sub>CB</sub> =50V, I <sub>E</sub> =0			0.1	μA
I <sub>EBO</sub>	Emitter cut off current	V <sub>EB</sub> =4V, I <sub>C</sub> =0			0.1	μA
h <sub>FE</sub> *	DC forward current gain	V <sub>CE</sub> =6V, I <sub>C</sub> =1mA	120		820	—
h <sub>FE</sub>	DC forward current gain	V <sub>CE</sub> =6V, I <sub>C</sub> =0.1mA	70			—
V <sub>CE(sat)</sub>	C to E Saturation voltage	I <sub>C</sub> =100mA, I <sub>B</sub> =10mA			0.3	V
f <sub>T</sub>	Gain band width product	V <sub>CE</sub> =6V, I <sub>E</sub> =-10mA		200		MHz
C <sub>ob</sub>	Collector output capacitance	V <sub>CB</sub> =6V, I <sub>E</sub> =0, f=1MHz		4		pF
NF	Noise figure	V <sub>CE</sub> =6V, I <sub>E</sub> =-0.1mA, f=1kHz, R <sub>G</sub> =2kΩ			15	dB

\*: It shows h<sub>FE</sub> classification in right table.

ITEM	Q	R	S	T
h <sub>FE</sub>	120~270	180~390	270~560	390~820

## OUTLINE DRAWING

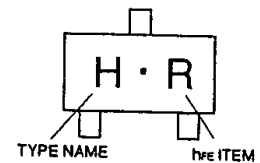
Unit:mm



## TERMINAL CONNECTOR

- ① : BASE  
② : EMITTER  
③ : COLLECTOR
- EIAJ : SC-70  
JEDEC :

## MARKING

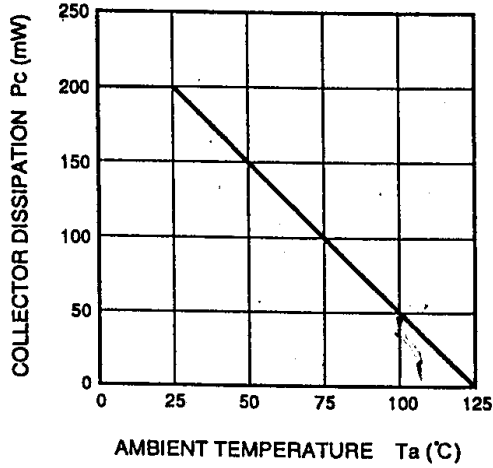


(Transistor)  
**2SC4155A**

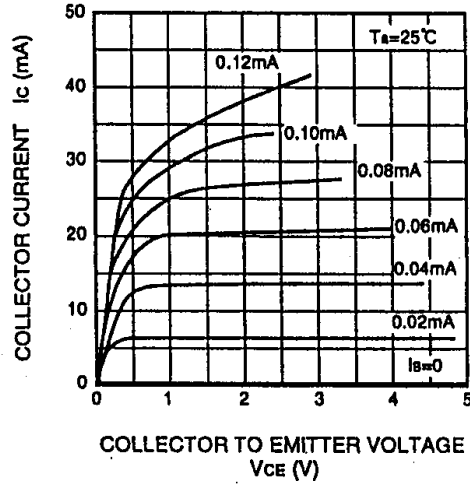
For Low Frequency Amplify Application  
 Silicon NPN Epitaxial Type (Super Mini type)

**TYPICAL CHARACTERISTICS**

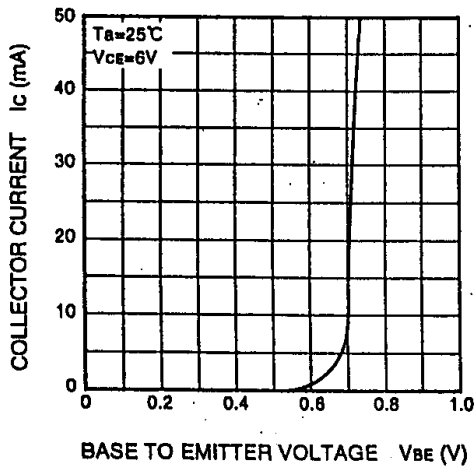
**COLLECTOR DISSIPATION  
 VS. AMBIENT TEMPERATURE**



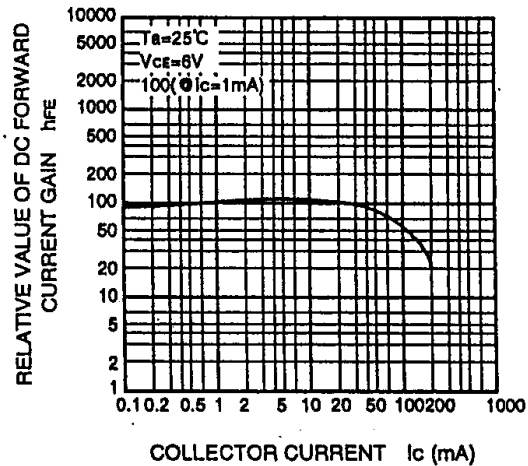
**COMMON EMITTER OUTPUT**



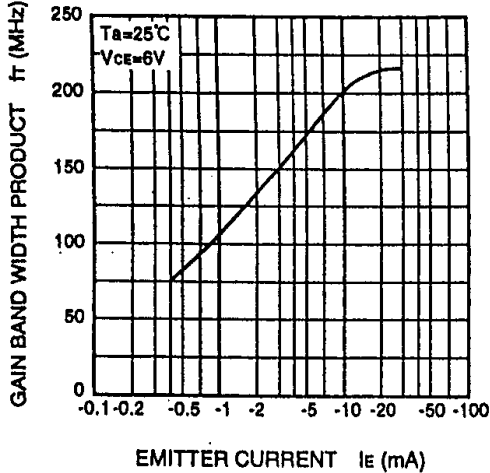
**COMMON EMITTER TRANSFER**



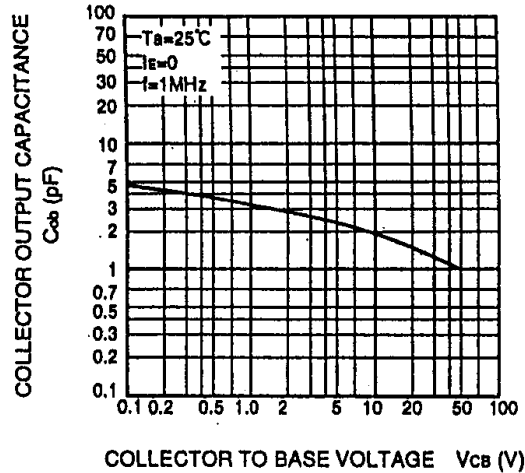
**DC FORWARD CURRENT GAIN  
 VS. COLLECTOR CURRENT**



**GAIN BAND WIDTH PRODUCT  
 VS. EMITTER CURRENT**



**COLLECTOR OUTPUT CAPACITANCE  
 VS. COLLECTOR TO BASE VOLTAGE**



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