

<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

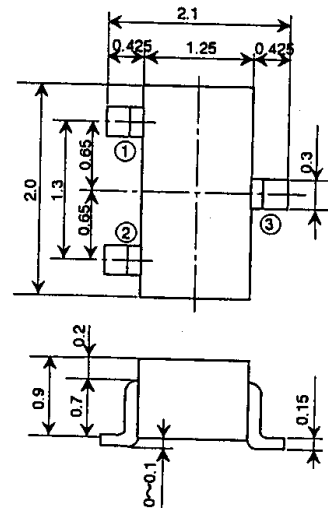
- Small collector to emitter saturation voltage
 $V_{CE(sat)}=0.3V$ max
- Excellent lineality of DC forward current gain
- Super mini package for easy mounting

APPLICATION

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

OUTLINE DRAWING

Unit:mm



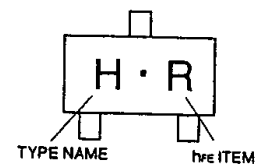
TERMINAL CONNECTOR

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

MAXIMUM RATINGS (Ta=25°C)

Symbol	Parameter	Ratings	Unit
VCBO	Collector to Base voltage	50	V
VEBO	Emitter to Base voltage	6	V
VCEO	Collector to Emitter voltage	50	V
IC	Collector current	200	mA
PC	Collector dissipation(Ta=25°C)	150	mW
Tj	Junction temperature	+125	°C
Tstg	Storage temprature	-55to+125	°C

MARKING



ELECTRICAL CHARACTERISTICS (Ta=25°C)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
V(BR)CEO	C to E break down voltage	IC=100μA, RBE=∞	50			V
ICBO	Collector cut off current	VCB=50V, IE=0			0.1	μA
IEBO	Emitter cut off current	VEB=4V, IC=0			0.1	μA
hFE *	DC forward current gain	VCE=6V, IC=1mA	120		820	—
hFE	DC forward current gain	VCE=6V, IC=0.1mA	70			—
VCE(sat)	C to E Saturation voltage	IC=100mA, IB=10mA			0.3	V
fr	Gain band width product	VCE=6V, IE=-10mA		200		MHz
Cob	Collector output capacitance	VCB=6V, IE=0, f=1MHz		4		pF
NF	Noise figure	VCE=6V, IE=-0.1mA, f=1kHz, Rg=2kΩ			15	dB

* :It shows hFE claccification in right table.

ITEM	Q	R	S	T
hFE	120~270	180~390	270~560	390~820

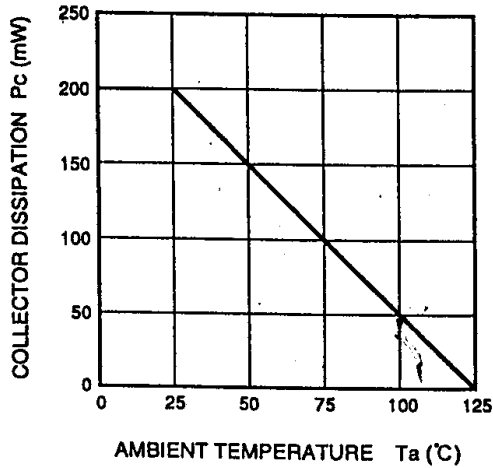
〈Transistor〉

2SC4155A

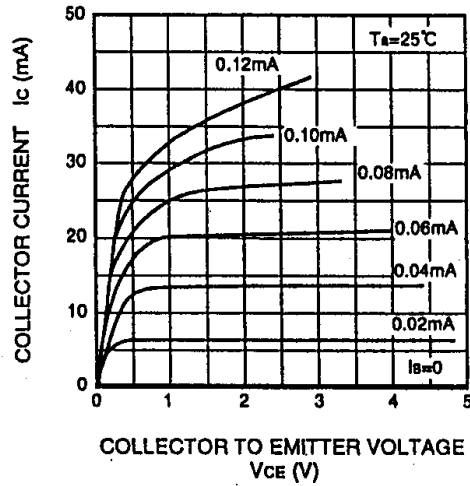
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TYPICAL CHARACTERISTICS

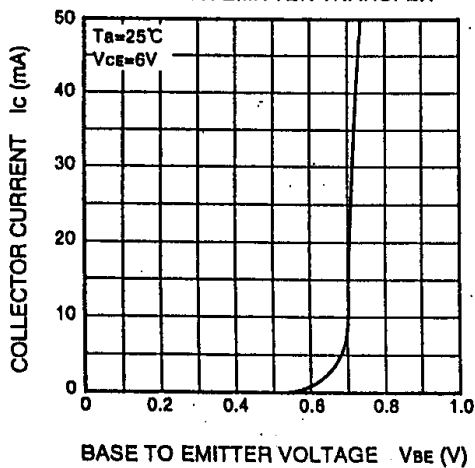
COLLECTOR DISSIPATION
VS. AMBIENT TEMPERATURE



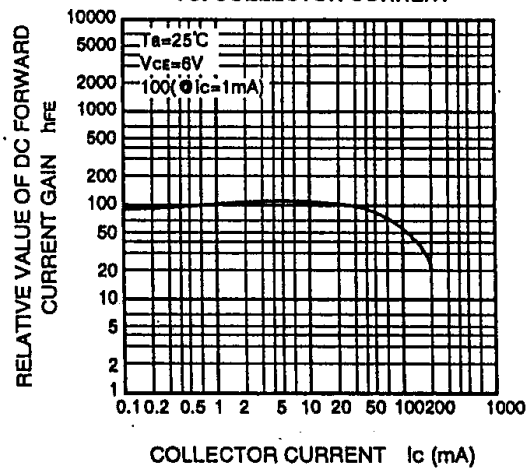
COMMON EMITTER OUTPUT



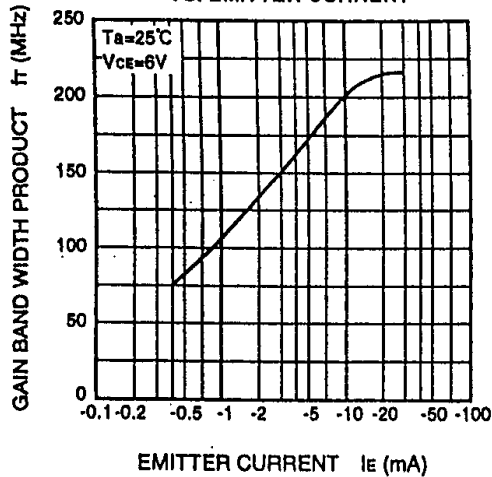
COMMON EMITTER TRANSFER



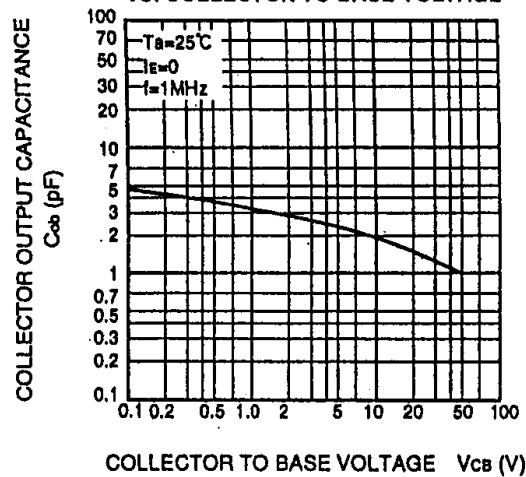
DC FORWARD CURRENT GAIN
VS. COLLECTOR CURRENT



GAIN BAND WIDTH PRODUCT
VS. EMITTER CURRENT



COLLECTOR OUTPUT CAPACITANCE
VS. COLLECTOR TO BASE VOLTAGE





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