FOR LOW FREQUENCY AMPLIFY APPLICATION SILICON NPN EPITAXIAL TYPE

# **DESCRIPTION**

2SC4155A is a mini package resin sealed silicon NPN epitaxial transistor.

It is designed for low frequency voltage application.

# **FEATURE**

- Small collector to emitter saturation voltage VcE(sat)=0.3V max(@Ic=100mA/IB=10mA)
- ●Excellent linearity of DC forward current gain
- Super mini package for easy mounting

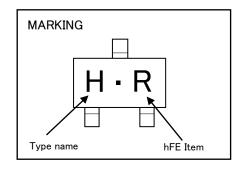
# **APPLICATION**

For Hybrid IC, Small type machine low frequency voltage amplify application.

# MAXIMUM RATINGS (Ta=25°C)

Parameter	Symbol	Ratings	Unit	
Collector to Base voltage	Vсво	50	٧	
Emitter to Base voltage	V <sub>EBO</sub>	6	٧	
Collector to Emitter voltage	Vceo	50	٧	
Collector current	Ic	200	mA	
Collector dissipation	Pc	200	mW	
Junction temperature	Tj	+150	°C	
Storage temperature	Tstg	-55 <b>~</b> + 150	°C	

# OUTLINE DRAWING 2.1 0.425 1.25 0.425 TERMINAL CONNECTER 1:BASE 2:EMITTER JEDEC: 3:COLLECTOR



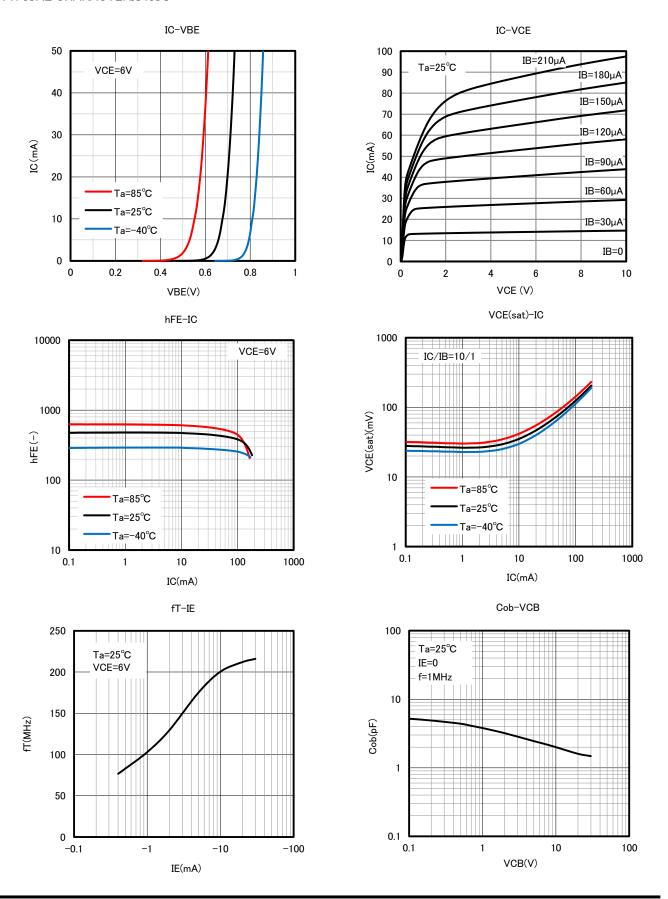
# ELECTRICAL CHARACTERISTICS (Ta=25°C)

Parameter Sy	0 1 1	T	Limits			11. 2
	Symbol	Test conditions	Min	Тур	Max	Unit
C to E breakdown voltage	V(BR)CEO	$I_{C}$ =100 $\mu$ A , $R_{BE}$ = $\infty$	50	_	_	٧
Collector cut off current	Ісво	$V_{CB}$ =50V , $I_{E}$ =0mA	ı	-	0.1	μΑ
Emitter cut off current	<b>І</b> ЕВО	$V_{EB}$ =4 $V$ , $I_{C}$ =0mA	_	_	0.1	μΑ
DC forward current gain	hFE	$V_{CE}$ =6 $V$ , $I_{C}$ =1 $mA$	120	(※)	560	-
DC forward current gain	hFE	V <sub>CE</sub> =6V , I <sub>C</sub> =0.1mA	70	1	_	-
C to E Saturation voltage	VCE(sat)	I <sub>C</sub> =100mA , I <sub>B</sub> =10mA	_	_	0.3	٧
Gain bandwidth product	fτ	V <sub>CE</sub> =6V , I <sub>E</sub> =-10mA	_	200	_	MHz
Collector output capacitance	Cob	$V_{CB}$ =6 $V$ , $I_E$ =0 , f=1 $MHz$	ı	4	_	pF
Noise figure	NF	$V_{\text{CE}}$ =6V , $I_{\text{E}}$ =-0.1mA , f=1kHz , RG=2k $\Omega$	_	_	15	dB

 $\ensuremath{\ensuremath{\mathbb{X}}})$  It shows hFE classification at right table.

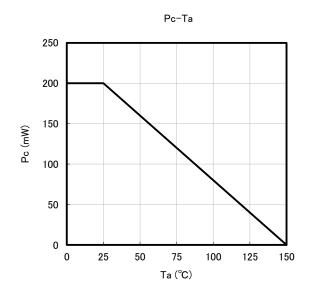
Item	Q	R	S
hFE	120~270	180~390	270~560

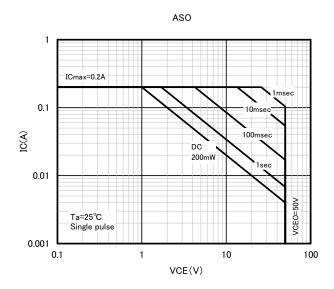
# TYPICAL CHARACTERISTICS



# 2SC4155A

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