# 2SA1603A

FOR LOW FREQUENCY AMPLIFY APPLICATION SILICON PNP EPITAXIAL TYPE(Super mini type)

#### **DESCRIPTION**

2SA1603A is a super mini package resin sealed silicon PNP epitaxial transistor,

It is designed for low frequency voltage application.

### **FEATURE**

Small collector to emitter saturation voltage.

VCE(sat)=-0.3V max

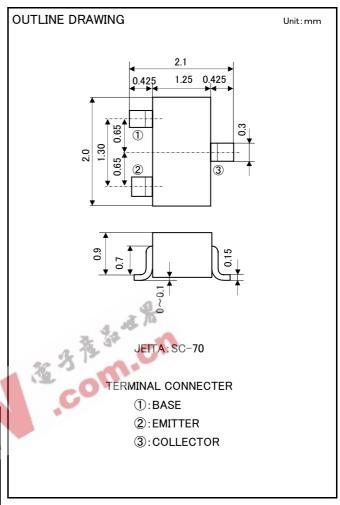
- ●Excellent linearity of DC forward gain.
- Super mini package for easy mounting

### **APPLICATION**

For Hybrid IC,small type machine low frequency voltage Amplify application.

### MAXIMUM RATINGS (Ta=25°C)

Parameter	Ratings	Unit
Collector to Base voltage	-60	٧
Collector to Emitter voltage	oltage -50	
Emitter to Base voltage	-6	٧
Collector current	-150	mA
Collector dissipation	200	mW
Junction temperature	+150	Ĵ
Storage temperature	-55 <b>~</b> + 150	°C
	Collector to Base voltage  Collector to Emitter voltage  Emitter to Base voltage  Collector current  Collector dissipation  Junction temperature	Collector to Base voltage -60  Collector to Emitter voltage -50  Emitter to Base voltage -6  Collector current -150  Collector dissipation 200  Junction temperature +150



### ELECTRICAL CHARACTERISTICS (Ta=25°C)

Parameter	Symbol	Test conditions		Limits		
rarameter	Symbol			Тур	Max	Unit
C to E break down voltage	V(BR)ceo	I $_{\text{C}}$ =-100 $\mu$ A ,R $_{\text{BE}}$ = $\infty$	-50	-	_	٧
Collector cut off current	ICBO	V <sub>CB</sub> =60V, I <sub>E</sub> =0mA	_	_	-0.1	μΑ
Emitter cut off current	IEBO	$V_{EB}$ =-6V, I $_{C}$ =0mA	_	_	-0.1	μΑ
DC forward current gain	hFE	V <sub>CE</sub> =-6V, I <sub>C</sub> =-1mA	120	_	560	
DC forward current gain	hFE	V <sub>CE</sub> =-6V, I <sub>C</sub> =-0.1mA	70	-	_	
C to E Saturation Vlotage	VCE(sat)	I <sub>C</sub> =-30mA ,I <sub>B</sub> =-1.5mA	_	-	-0.3	٧
Gain bandwidth product	fT	$V_{CE}$ =-6V, $I_{E}$ =10mA	_	200	_	MHz
Collector output capacitance	Cob	$V_{CB}$ =-6V, $I_{E}$ =0,f=1MHz	_	2.5	_	pF

※) It shows hFE classification in below table.

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



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