

# 2SA1603

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

## DESCRIPTION

2SA1603 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)

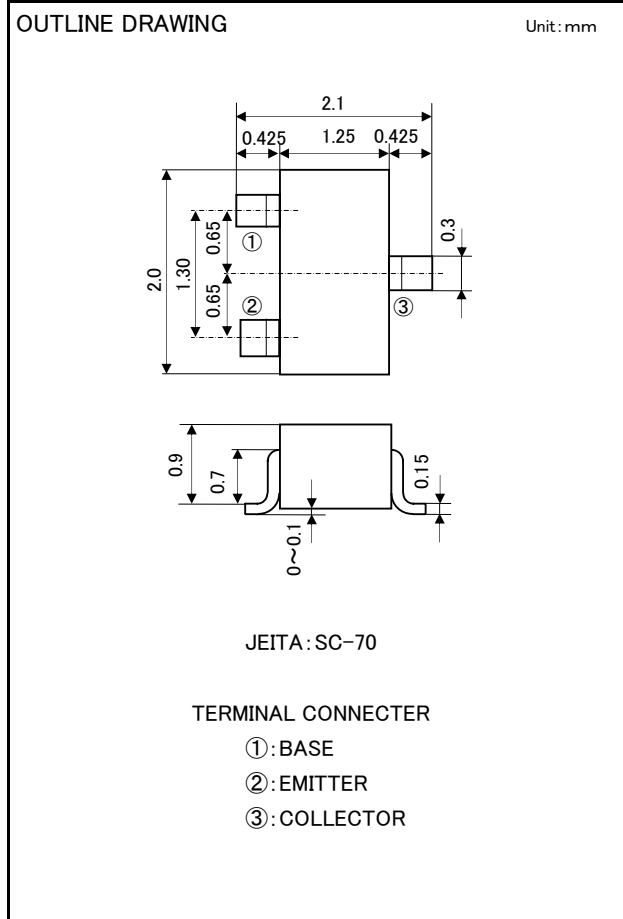
Symbol	Parameter	Ratings	Unit
V <sub>CB0</sub>	Collector to Base voltage	-50	V
V <sub>CEO</sub>	Collector to Emitter voltage	-50	V
V <sub>EB0</sub>	Emitter to Base voltage	-6	V
I <sub>o</sub>	Collector current	-100	mA
P <sub>c</sub>	Collector dissipation	200	mW
T <sub>j</sub>	Junction temperature	+150	°C
T <sub>stg</sub>	Storage temperature	-55~+150	°C

## ELECTRICAL CHARACTERISTICS (Ta=25°C)

Parameter	Symbol	Test conditions	Limits			Unit
			Min	Typ	Max	
C to E break down voltage	V(BR) <sub>CEO</sub>	I <sub>C</sub> =-100μA, R <sub>BE</sub> =∞	-50	-	-	V
Collector cut off current	ICBO	V <sub>CB</sub> =-50V, I <sub>E</sub> =0mA	-	-	-0.5	μA
Emitter cut off current	IEBO	V <sub>EB</sub> =-4V, I <sub>C</sub> =0mA	-	-	-0.5	μA
DC forward current gain	hFE	V <sub>CE</sub> =-6V, I <sub>C</sub> =-1mA	※	120	-	820
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	V
Gain bandwidth product	fT	V <sub>CE</sub> =-6V, I <sub>E</sub> =10mA	-	200	-	MHz
Collector output capacitance	Cob	V <sub>CB</sub> =-6V, I <sub>E</sub> =0, f=1MHz	-	2.5	-	pF

※) It shows hFE classification in below table.

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





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