

## PRELIMINARY

2SC5633

Notices: This is not a final specification.  
Some parametric limits are subject to change.

FOR HIGH FREQUENCY AMPLIFY APPLICATION  
SILICON NPN EPITAXIAL TYPE

## DESCRIPTION

2SC5633 is a super mini package resin sealed silicon NPN epitaxial transistor, It is designed for high voltage application.

## FEATURE

Small collector to emitter saturation voltage.

$$V_{CE(sat)} = 0.5V \text{ max}$$

Super mini package for easy mounting

## APPLICATION

For Hybrid IC, DC-DC converter

MAXIMUM RATINGS ( $T_a = 25^\circ\text{C}$ )

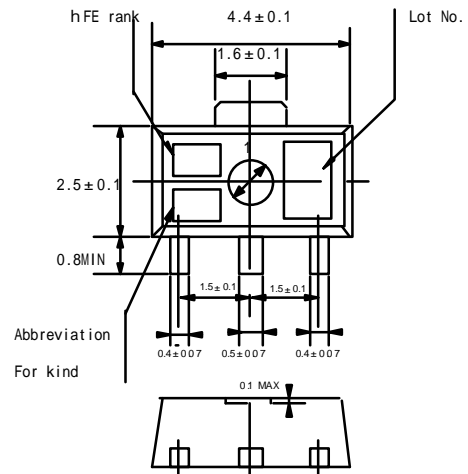
Symbol	Parameter	Ratings	Unit
$V_{CBO}$	Collector to Base voltage	300	V
$V_{CEO}$	Collector to Emitter voltage	300	V
$V_{EBO}$	Emitter to Base voltage	7	V
$I_O$	Collector current	100	mA
$P_c$	Collector dissipation	500	mW
$T_j$	Junction temperature	+ 150	
$T_{stg}$	Storage temperature	-55 ~ + 150	

ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Test conditions	Limits			Unit
			Min	Typ	Max	
C to B break down voltage	$V(BR)_{CBO}$	$I_C = 50 \mu\text{A}, I_E = 0$	300	-	-	V
E to B break down voltage	$V(BR)_{EBO}$	$I_E = 50 \mu\text{A}, I_C = 0$	7	-	-	V
C to E break down voltage	$V(BR)_{CEO}$	$I_C = 1\text{mA}, R_{BE} =$	300	-	-	V
Collector cut off current	$I_{CBO}$	$V_{CB} = -300V, I_E = 0\text{mA}$	-	-	0.5	$\mu\text{A}$
Emitter cut off current	$I_{EBO}$	$V_{EB} = 5V, I_C = 0\text{mA}$	-	-	0.5	$\mu\text{A}$
DC forward current gain	hFE	$V_{CE} = 10V, I_C = 10\text{mA}$	60	-	305	
C to E Saturation Voltage	$V_{CE(sat)}$	$I_C = 100\text{mA}, I_B = 10\text{mA}$	-	-	0.5	V
Gain bandwidth product	fT	$V_{CE} = 6V, I_E = -10\text{mA}$	-	40	-	MHz
Collector output capacitance	$C_{ob}$	$V_{CB} = 6V, I_E = 0, f = 1\text{MHz}$	-	3.0	-	pF

## OUTLINE DRAWING

Unit : mm



JEITA: SC-62

## TERMINAL CONNECTER

: EMITTER

: COLLECTOR

: BASE



*Marketing division, Marketing planning department*

6-41 Tsukuba, Isahaya, Nagasaki, 854-0065 Japan

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