

2SC5383-T150

FOR LOW FREQUENCY AMPLIFY APPLICATION
SILICON NPN EPITAXIAL TYPE

AEC-Q101 Compliance

DESCRIPTION

2SC5383 is a mini package resin sealed silicon NPN epitaxial transistor, It is designed for low frequency voltage application.

FEATURE

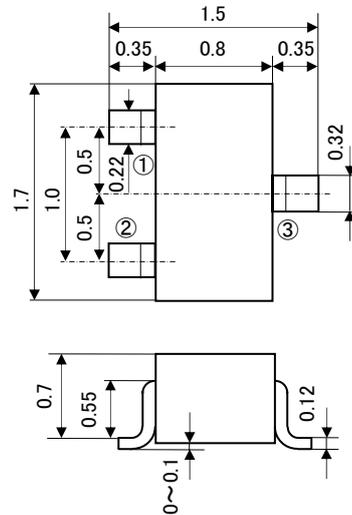
- Small collector to emitter saturation voltage.
 $V_{CE(sat)}=0.3V \text{ max (@}I_C=100mA/I_B=10mA)$
- Excellent linearity of DC forward current gain.
- Super mini package for easy mounting

APPLICATION

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

OUTLINE DRAWING

Unit:mm



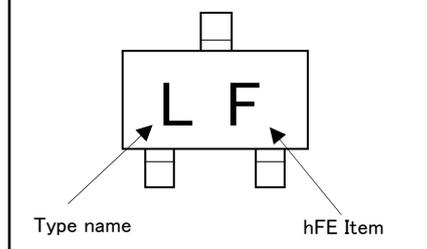
TERMINAL CONNECTER

- ①: BASE JEITA: SC-75A
- ②: EMITTER JEDEC: -
- ③: COLLECTOR

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

Parameter	Symbol	Ratings	Unit
Collector to Base voltage	V_{CBO}	50	V
Emitter to Base voltage	V_{EBO}	6	V
Collector to Emitter voltage	V_{CEO}	50	V
Collector current	I_O	200	mA
Collector dissipation	P_c	150	mW
Junction temperature	T_j	+150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55~+150	$^\circ\text{C}$

MARKING



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

Parameter	Symbol	Test conditions	Limits			Unit
			Min	Typ	Max	
C to E breakdown voltage	$V(BR)_{CEO}$	$I_C=100\mu A, R_{BE}=\infty$	50	-	-	V
Collector cut off current	I_{CBO}	$V_{CB}=50V, I_E=0mA$	-	-	0.1	μA
Emitter cut off current	I_{EBO}	$V_{EB}=6V, I_C=0mA$	-	-	0.1	μA
DC forward current gain ※	hFE	$V_{CE}=6V, I_C=1mA$	150	-	500	-
DC forward current gain	hFE	$V_{CE}=6V, I_C=0.1mA$	90	-	-	-
C to E Saturation voltage	$V_{CE(sat)}$	$I_C=100mA, I_B=10mA$	-	-	0.3	V
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
Noise figure	NF	$V_{CE}=6V, I_E=-0.1mA, f=1kHz, RG=2k\Omega$	-	-	15	dB

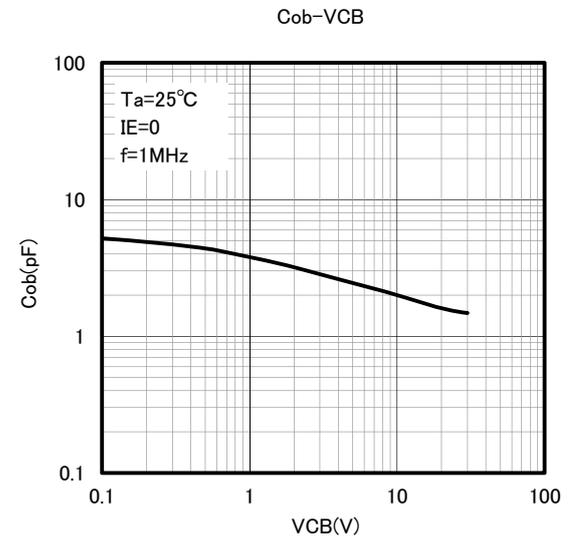
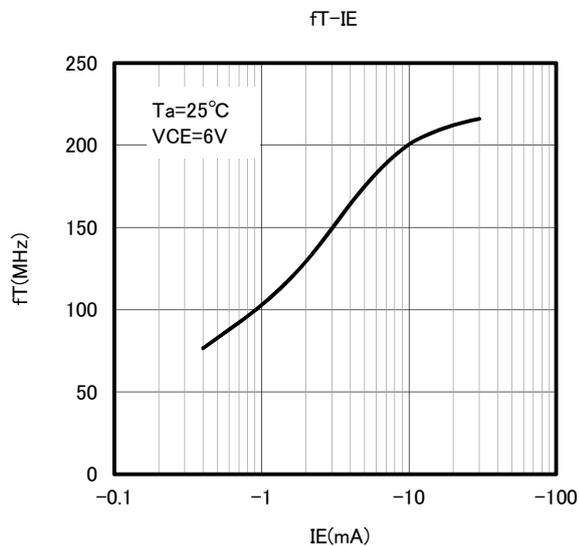
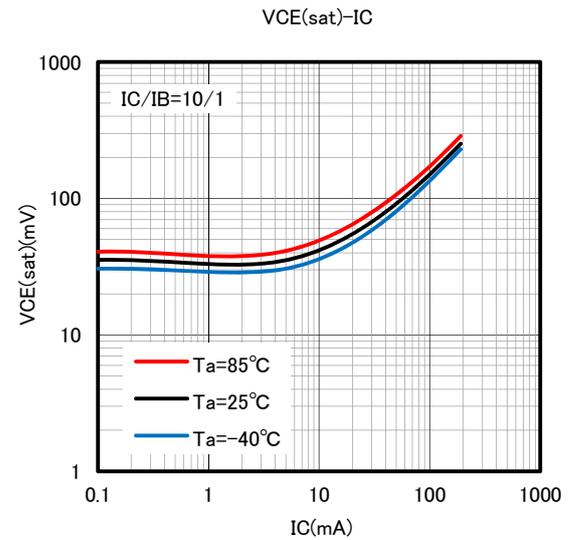
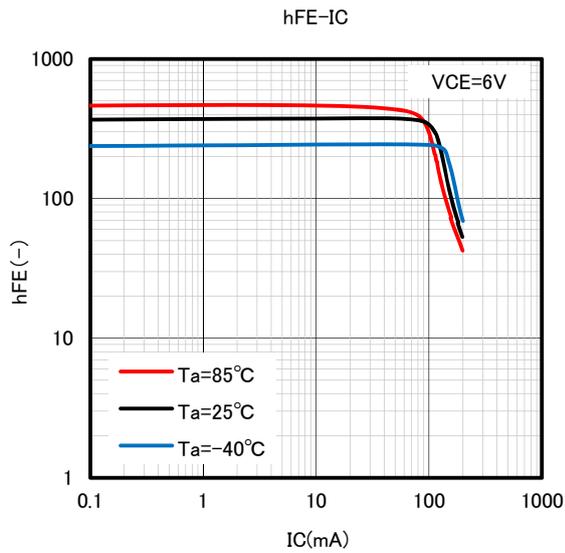
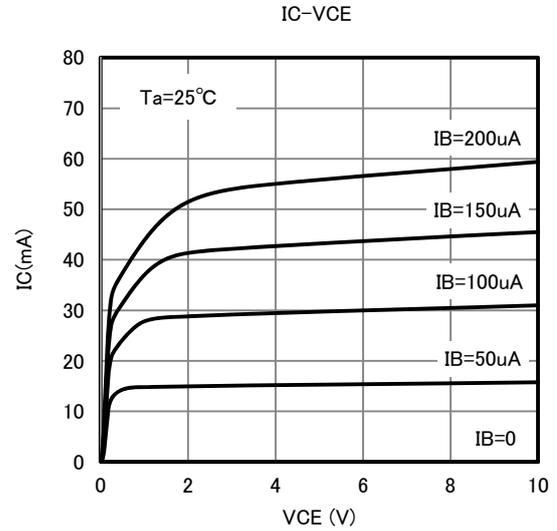
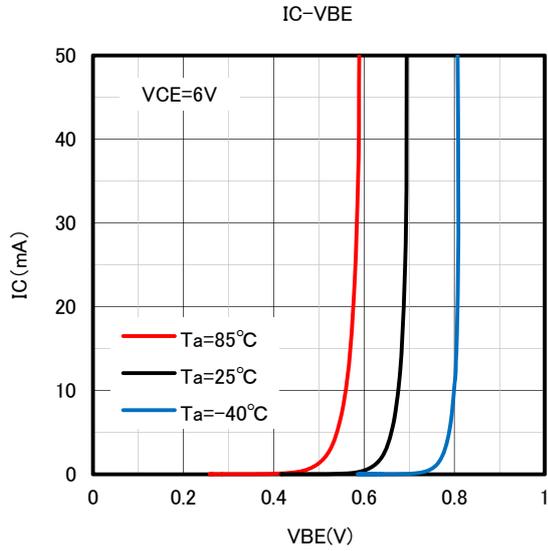
※) It shows hFE classification at right table.

Item	E	F
hFE Item	150~300	250~500

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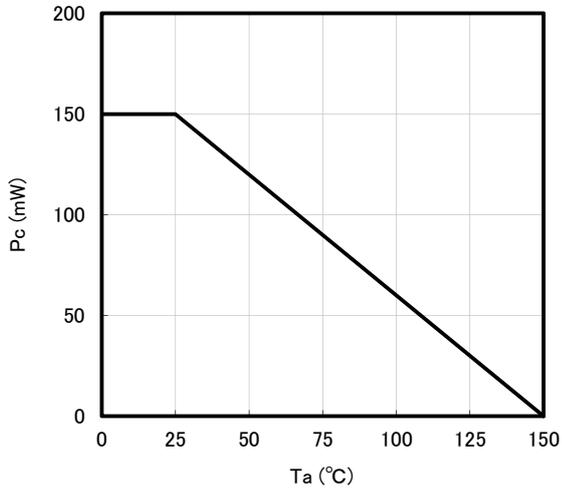
TYPICAL CHARACTERISTICS



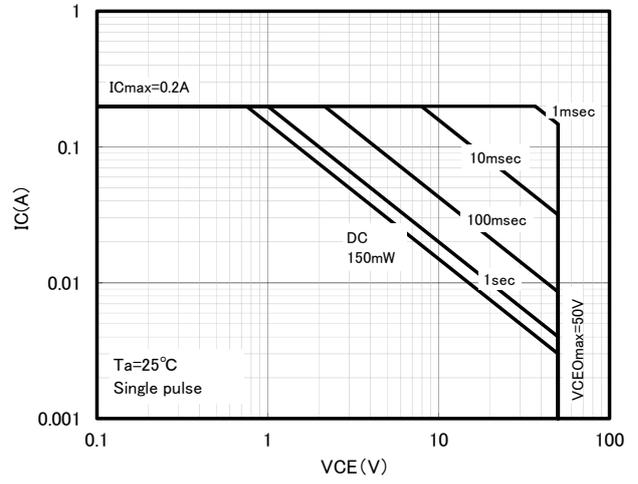
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FOR LOW FREQUENCY AMPLIFY APPLICATION
SILICON NPN EPITAXIAL TYPE

Pc-Ta



ASO





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