

2SC5556

Silicon NPN epitaxial planar type

For UHF band low-noise amplification

■ Features

- Low noise figure NF
- High transition frequency f_T
- Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing and the magazine packing

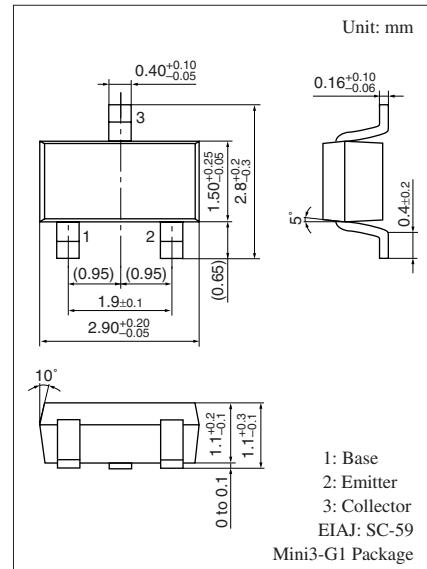
■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	15	V
Collector to emitter voltage	V_{CEO}	10	V
Emitter to base voltage	V_{EBO}	2	V
Collector current	I_C	80	mA
Collector power dissipation *	P_C	300	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

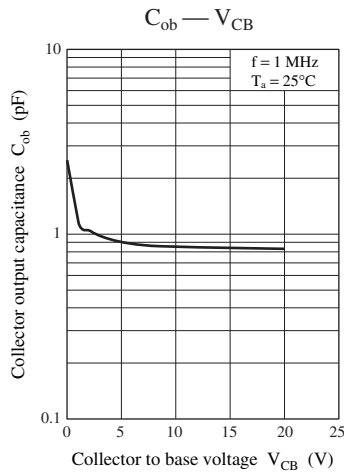
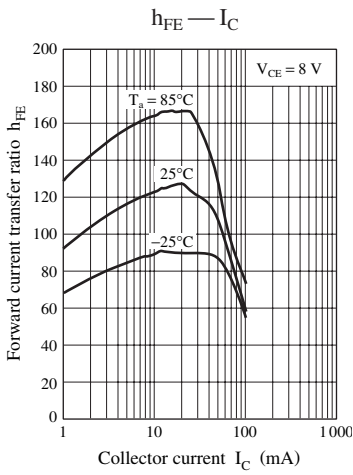
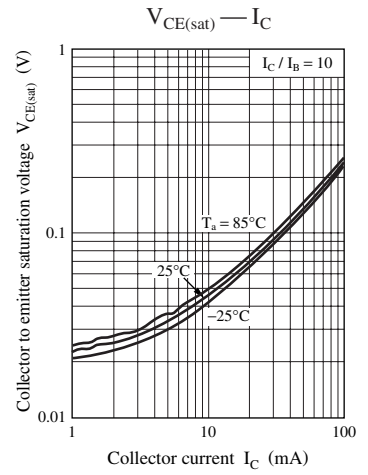
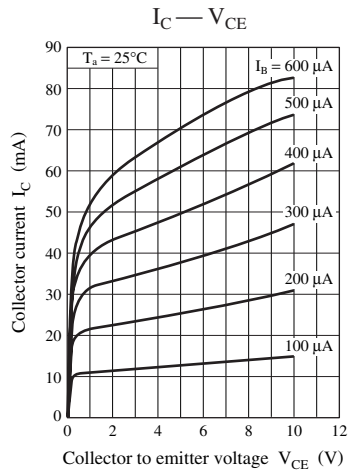
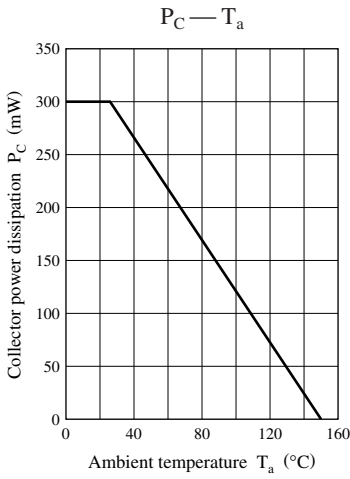
Note) *: Copper plate at the collector is more than 1.0 mm^2 in area, 1.0 mm in thickness

■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector to base voltage	V_{CBO}	$I_C = 10\ \mu\text{A}$, $I_E = 0$	15			V
Collector to emitter voltage	V_{CEO}	$I_C = 100\ \mu\text{A}$, $I_B = 0$	10			V
Collector cutoff current	I_{CBO}	$V_{CB} = 10\text{ V}$, $I_E = 0$			1	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = 2\text{ V}$, $I_C = 0$			1	μA
Forward current transfer ratio	h_{FE}	$V_{CE} = 8\text{ V}$, $I_C = 20\text{ mA}$	110		250	
Forward transfer gain	$ S_{21e} ^2$	$V_{CE} = 8\text{ V}$, $I_C = 20\text{ mA}$, $f = 800\text{ MHz}$	7.5	10		dB
Noise figure	NF	$V_{CE} = 8\text{ V}$, $I_C = 20\text{ mA}$, $f = 800\text{ MHz}$		1.7		dB
Maximum unilateral power gain	GUM	$V_{CE} = 8\text{ V}$, $I_C = 20\text{ mA}$, $f = 800\text{ MHz}$		11.5		dB
Collector output capacitance	C_{ob}	$V_{CB} = 10\text{ V}$, $I_E = 0$, $f = 1\text{ MHz}$		0.9	1.2	pF
Gain bandwidth product	f_T	$V_{CE} = 8\text{ V}$, $I_C = 20\text{ mA}$, $f = 800\text{ MHz}$	5.0	6.0		GHz



Marking symbol: 3K



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