

Silicon Epitaxial Planar Transistor

S8550

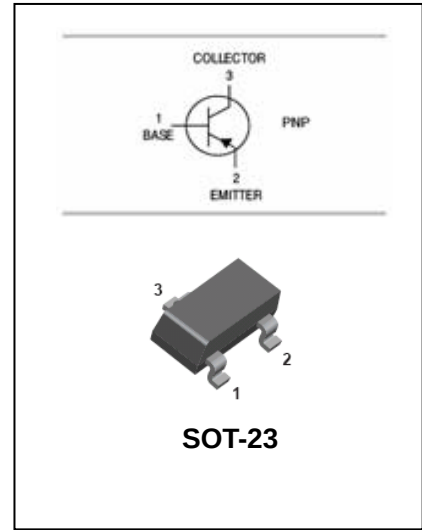
FEATURES

- High Collector Current.($I_C = -500\text{mA}$)
- Complementary To S8050.
- Excellent H_{FE} Linearity.



APPLICATIONS

- High Collector Current.



ORDERING INFORMATION

Type No.	Marking	Package Code
S8550	2TY	SOT-23

MAXIMUM RATING @ $T_a = 25^\circ\text{C}$ unless otherwise specified

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-25	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-500	mA
P_C	Collector Dissipation	300	mW
T_j, T_{stg}	Junction and Storage Temperature	-55~150	$^\circ\text{C}$

Silicon Epitaxial Planar Transistor**S8550****ELECTRICAL CHARACTERISTICS @ Ta=25 °C unless otherwise specified**

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu A, I_E = 0$	-40		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1mA, I_B = 0$	-25		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu A, I_C = 0$	-5		V
Collector cut-off current	I_{CBO}	$V_{CB} = -40V, I_E = 0$		-0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE} = -20V, I_B = 0$		-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -3V, I_C = 0$		-0.1	μA
DC current gain	h_{FE}	$V_{CE} = -1V, I_C = -50mA$	120	350	
		$V_{CE} = -1V, I_C = -500mA$	50		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500mA, I_B = -50mA$		-0.6	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500mA, I_B = -50mA$		-1.2	V
Transition frequency	f_T	$V_{CE} = -6V, I_C = -20mA$ $f = 30MHz$	150		MHz

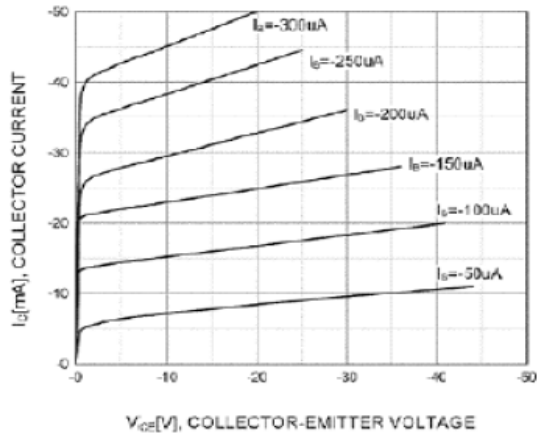
CLASSIFICATION OF $h_{FE(1)}$

Rank	L	H
Range	120-200	200-350

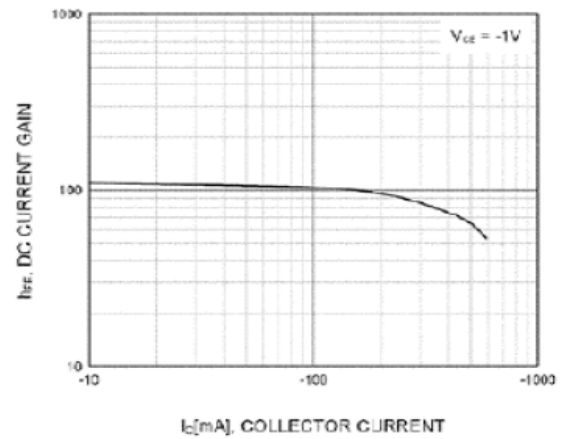
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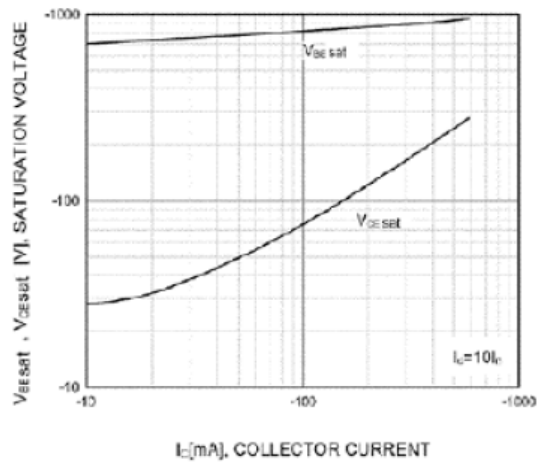
TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified



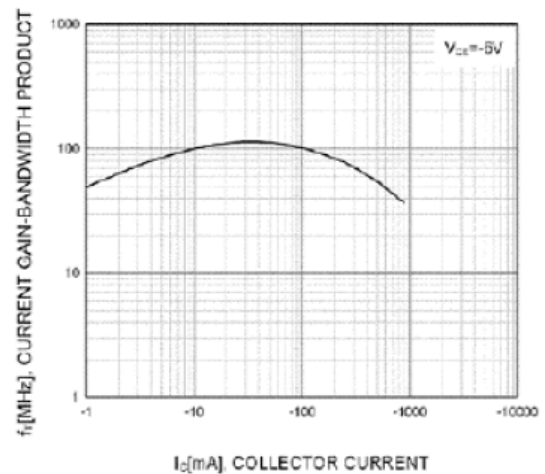
Static Characteristic



DC current Gain



Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage



Current Gain Bandwidth Product

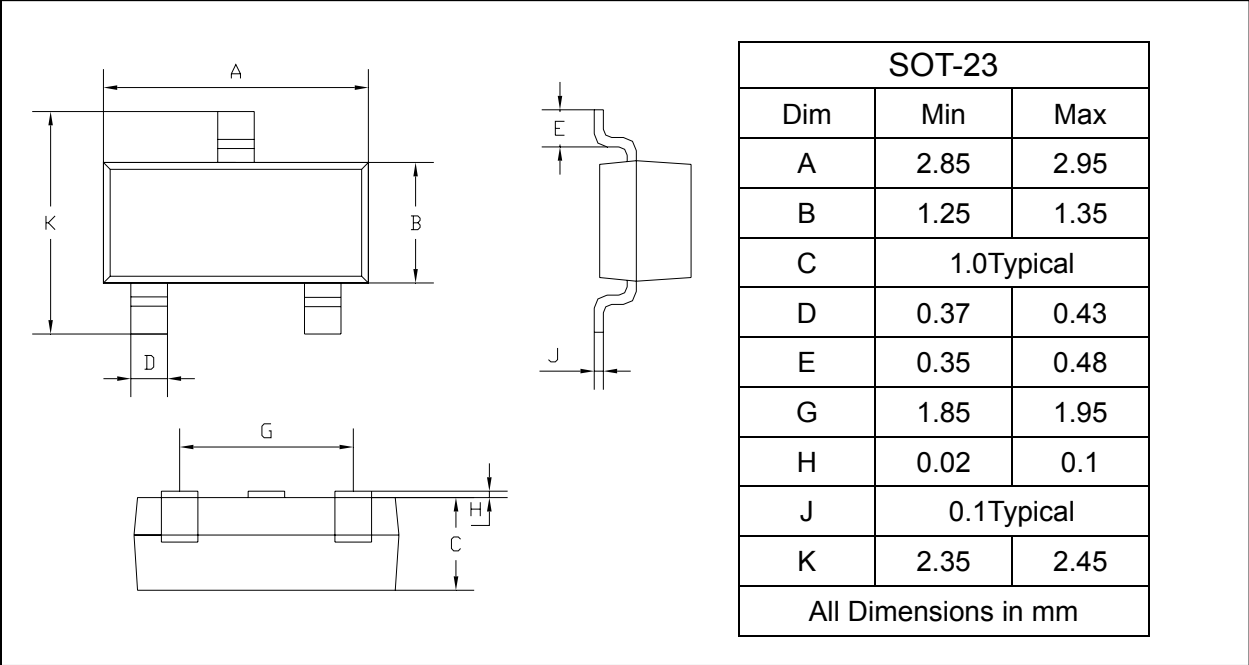
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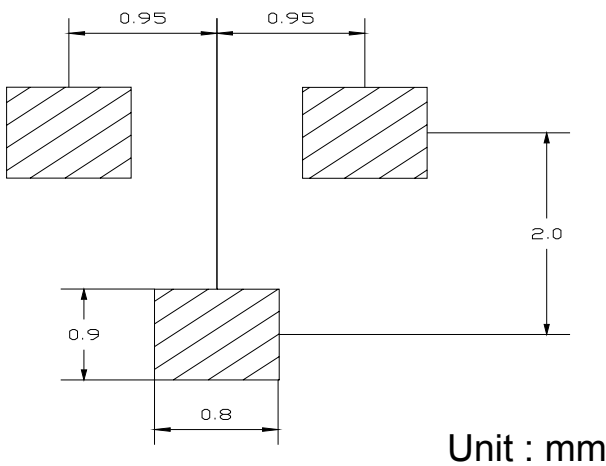
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
S8550	SOT-23	3000/Tape&Reel