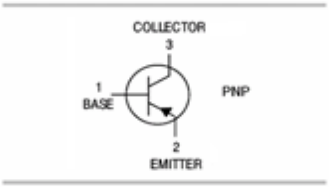
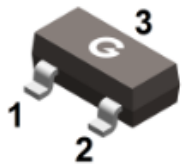
PNP Silicon Epitaxial Planar Transistor **TS8550**

FEATURES

- High collector current. (I_C= -500mA)
- Complementary to TS8050
- Excellent h_{FE} Linearity
- RoHS compliant with Halogen-free
- Qualified to AEC-Q101 Standards

HF





SOT-23

APPLICATIONS

- High collector current

ORDERING INFORMATION

Type No.	Marking	Package Code
TS8550-L	2TY	SOT-23
TS8550-H	2TY	SOT-23

MAXIMUM RATING @ Ta=25℃ 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
$R_{\theta JA}$	Thermal Resistance (Junction-to-Ambient)	417	℃/W
$R_{\theta JC}$	Thermal Resistance (Junction-to-Case) (Note1)	230	℃/W
T_J, T_{STG}	Junction and Storage Temperature	-55 to +150	℃

Note 1: Device on 15 mm x 15 mm x 1.5 mm epoxy PCB FR4.

PNP Silicon Epitaxial Planar Transistor **TS8550**

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

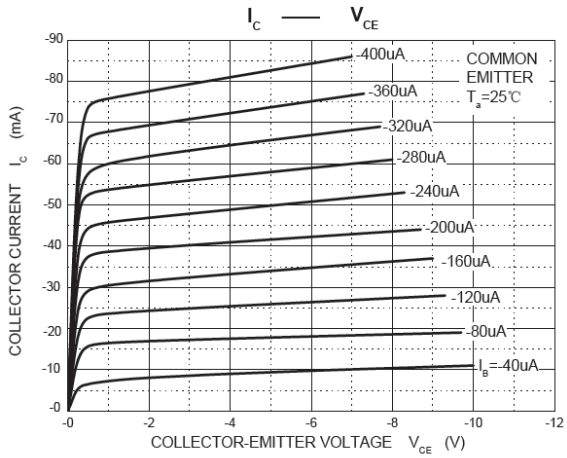
Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-100μA,I_E=0	-40		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-0.1mA,I_B=0	-25		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-100μA,I_C=0	-5		V
Collector cut-off current	I_{CBO}	V_{CB}=-40V,I_E=0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

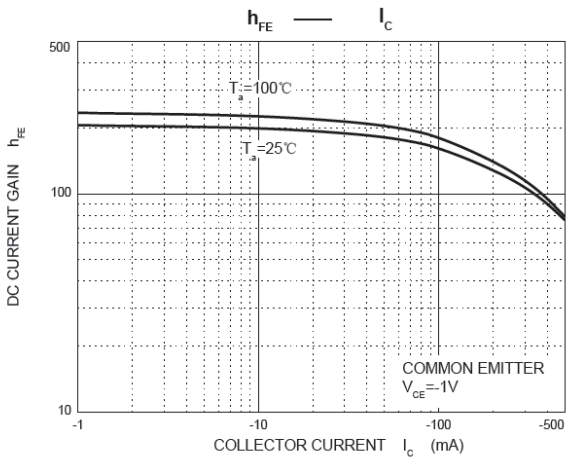
CLASSIFICATION OF $h_{FE(1)}$

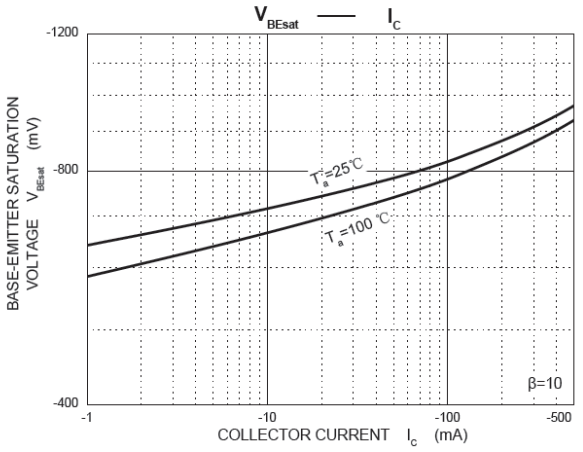
Rank	L	H
Range	120-200	200-350

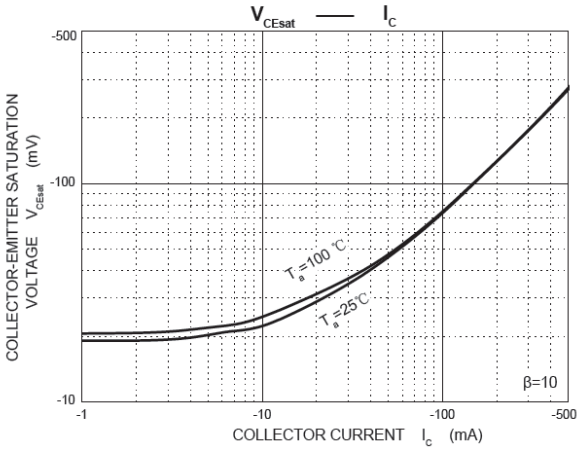
PNP Silicon Epitaxial Planar Transistor **TS8550**

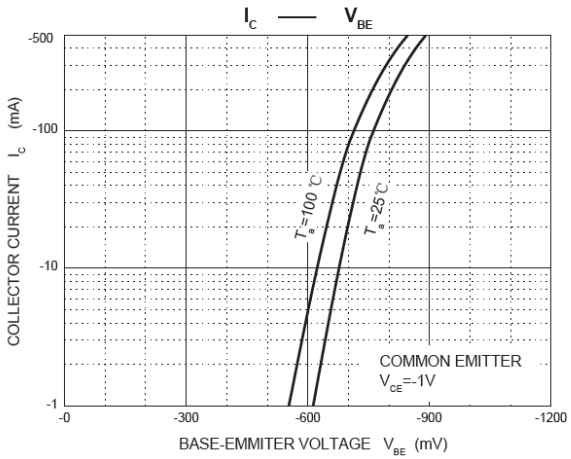
TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

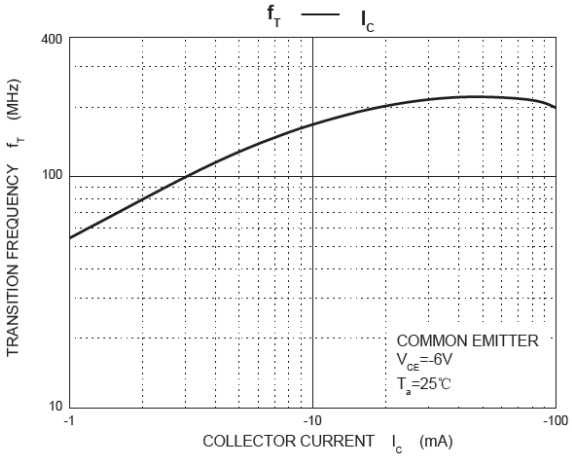








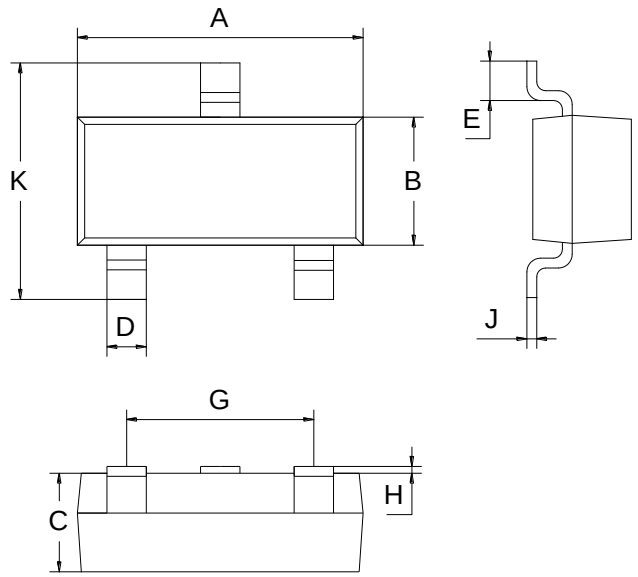




PNP Silicon Epitaxial Planar Transistor **TS8550**

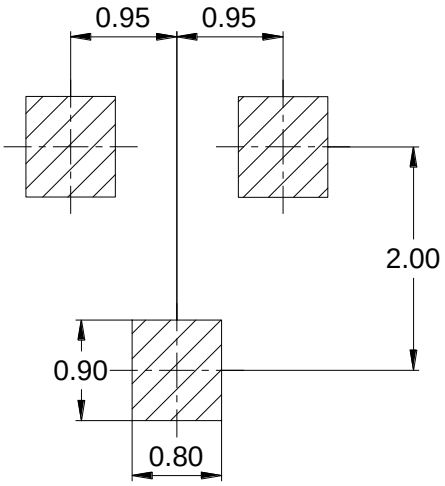
PACKAGE OUTLINE

Plastic surface mounted package SOT-23



SOT-23		
Dim	Min	Max
A	2.70	3.10
B	1.10	1.50
C	0.90	1.10
D	0.30	0.50
E	0.35	0.48
G	1.80	2.00
H	0.02	0.10
J	0.05	0.15
K	2.20	2.60
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit: mm

PACKAGE INFORMATION

Device	Package	Shipping
TS8550	SOT-23	3000 pcs / Tape & Reel