

SOT-89 Plastic-Encapsulate Transistors

SS8550 TRANSISTOR (PNP)

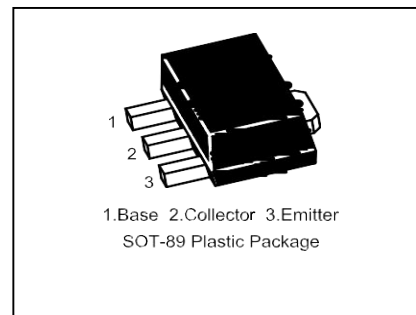
FEATURES

Compliment to SS8050

MARKING: Y2

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

Symbol	Parameter	Value	Unit
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	-1.5	A
P_C	Collector Power Dissipation	0.5	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	250	$^{\circ}\text{C/W}$
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~150	$^{\circ}\text{C}$



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

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu\text{A}, I_E = 0$	-40		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -0.1\text{mA}, I_B = 0$	-25		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu\text{A}, I_C = 0$	-5		V
Collector cut-off current	I_{CBO}	$V_{CB} = -40\text{V}, I_E = 0$		-0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE} = -20\text{V}, I_B = 0$		-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5\text{V}, I_C = 0$		-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = -1\text{V}, I_C = -100\text{mA}$	120	400	
	$h_{FE(2)}$	$V_{CE} = -1\text{V}, I_C = -800\text{mA}$	40		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -800\text{mA}, I_B = -80\text{mA}$		-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -800\text{mA}, I_B = -80\text{mA}$		-1.2	V
Base-emitter on voltage	$V_{BE(on)}$	$I_C = -1\text{V}, V_{CE} = -10\text{mA}$		-1	V
Base-emitter positive favor voltage	V_{BEF}	$I_B = -1\text{A}$		-1.55	V
Transition frequency	f_T	$V_{CE} = -10\text{V}, I_C = -50\text{mA}$	100		MHz
output capacitance	C_{ob}	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$		20	pF

CLASSIFICATION OF $h_{FE(1)}$

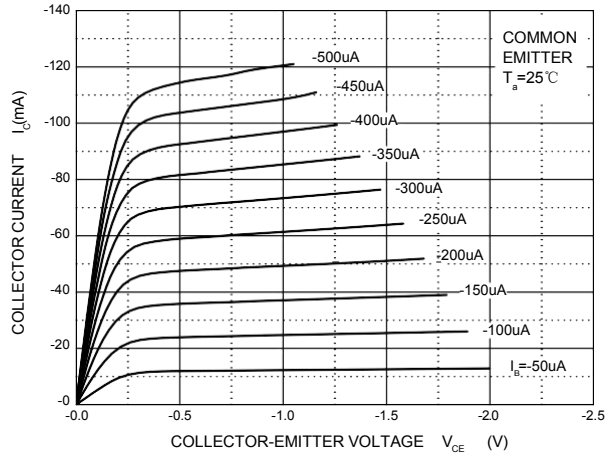
Rank	C	D	D1	D2
Range	120-200	160-300	200-350	300-400



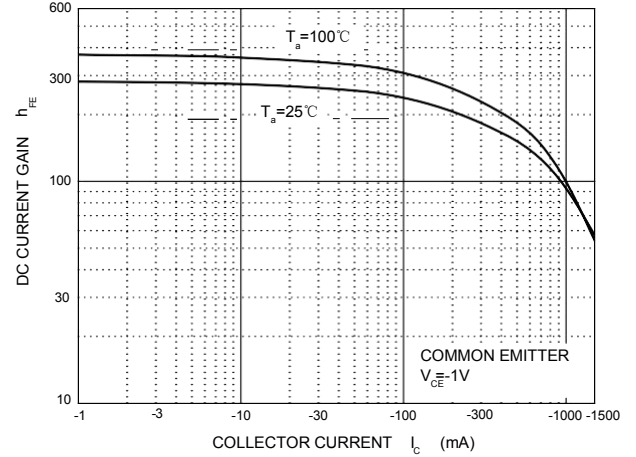
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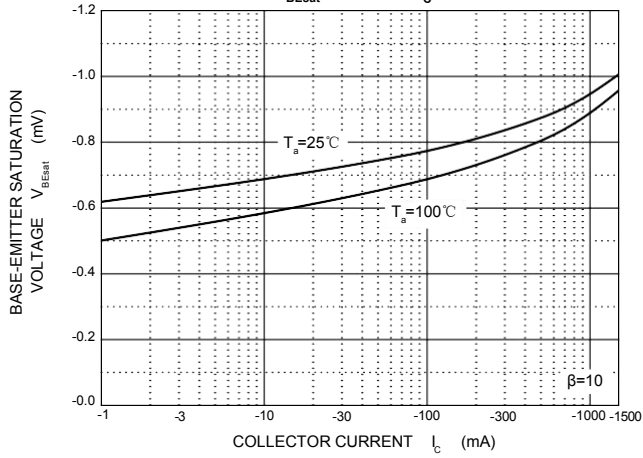
Static Characteristic



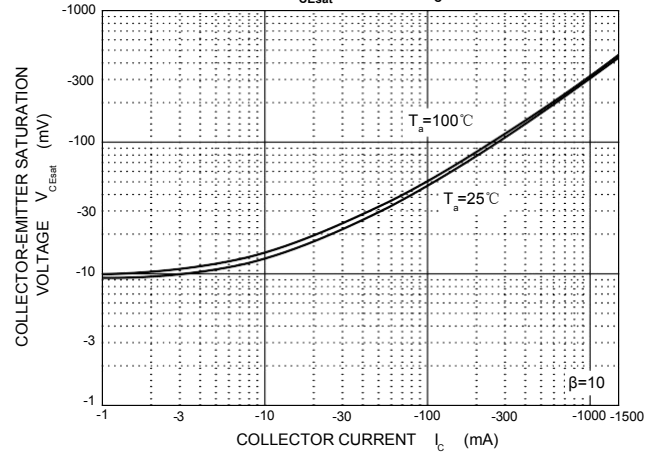
h_{FE} — I_C



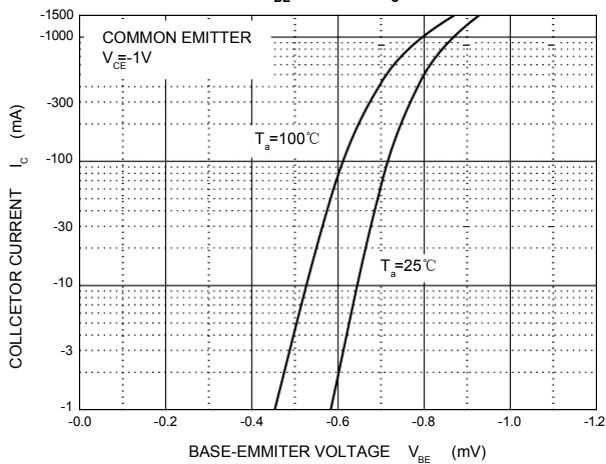
V_{BEsat} — I_C



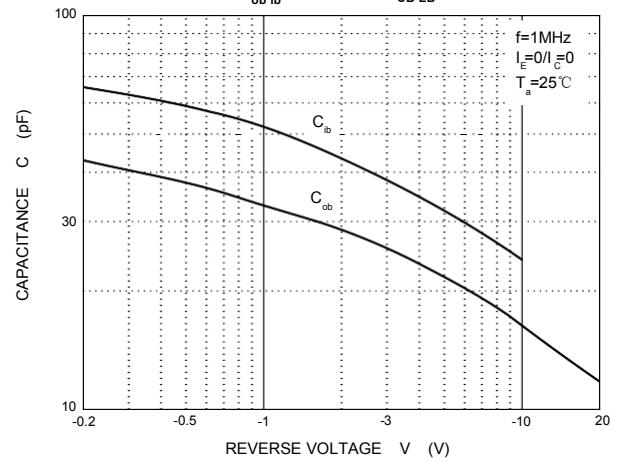
V_{CEsat} — I_C



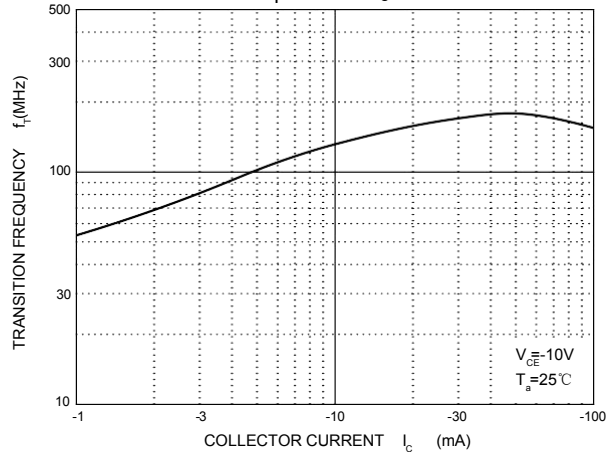
V_{BE} — I_C



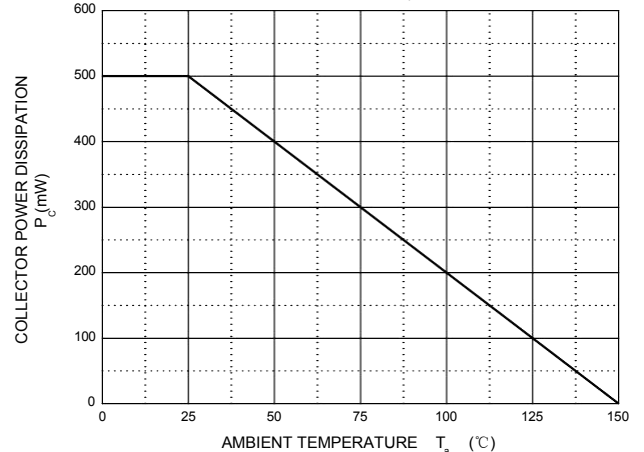
C_{ob}/C — $V/V_{CB,EB}$



f_T — I_C

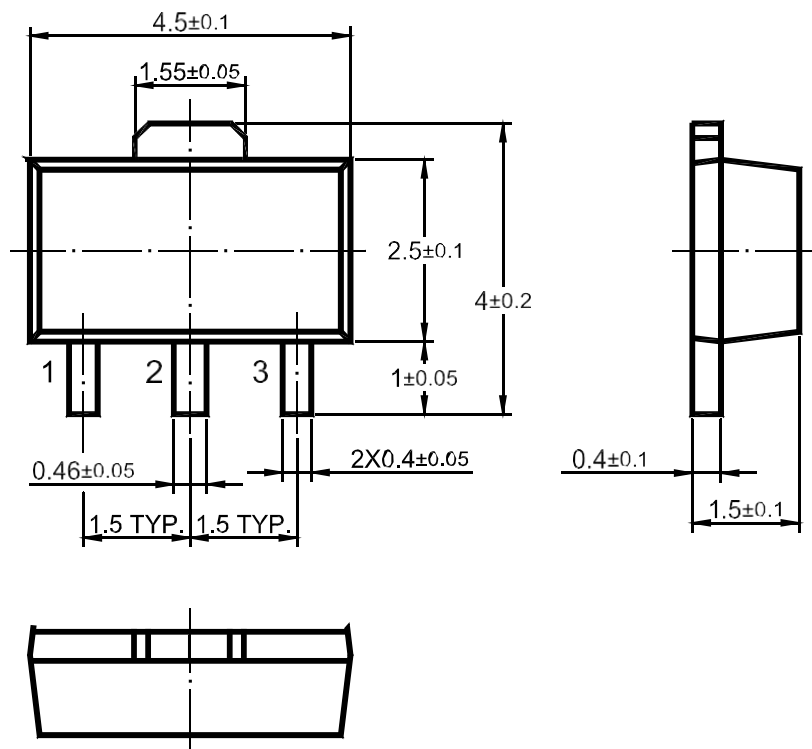


P_c — T_a



SS8550

SOT-89 Package Outline Dimensions



Dimensions in mm