



Features

- Complementary to 2SC2873
- Small Flat Package
- Power Amplifier and Switching Applications
- Low Saturation Voltage
- High Speed Switching Time

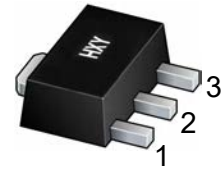
Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
PBSS5250X,115	SOT-89(SC-62)	NY	1000

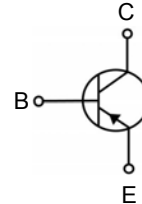
1.BASE

2.COLLECTOR

3.EMITTER



SOT-89
(SC-62)



Maximum Ratings (Ta=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	-50	V
V _{CEO}	Collector-Emitter Voltage	-50	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current	-2	A
P _C	Collector Power Dissipation	500	mW
R _{θJA}	Thermal Resistance From Junction To Ambient	250	°C/W
T _J , T _{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C

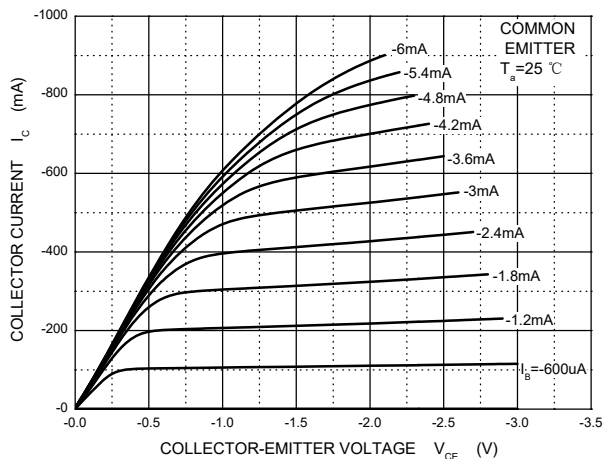
Electrical Characteristics (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C = -0.1mA, I _E =0	-50			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =-10mA, I _B =0	-50			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =-0.1mA, I _C =0	-5			V
Collector cut-off current	I _{CBO}	V _{CB} =-50V, I _E =0			-100	nA
Emitter cut-off current	I _{EBO}	V _{EB} =-5V, I _C =0			-100	nA
DC current gain	h _{FE}	V _{CE} =-2V, I _C =-500mA	70		240	
		V _{CE} =-2V, I _C =-2A	20			
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =-1A, I _B =-50mA			-0.5	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =-1A, I _B =-50mA			-1.2	V
Collector output capacitance	C _{ob}	V _{CB} =-10V, I _E =0, f=1MHz		40		pF
Transition frequency	f _T	V _{CE} =-2V, I _C = -0.5A	100			MHz

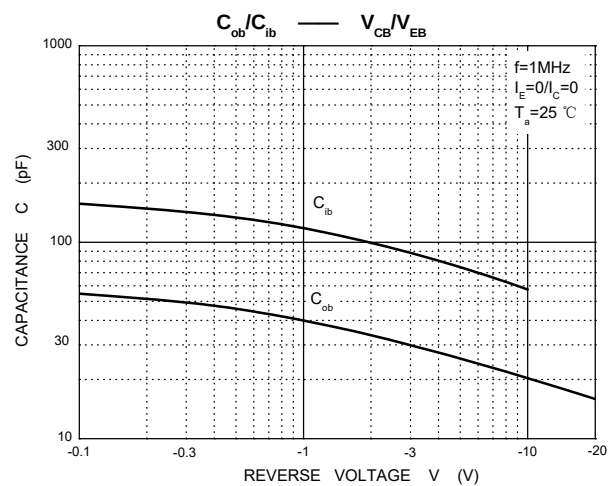
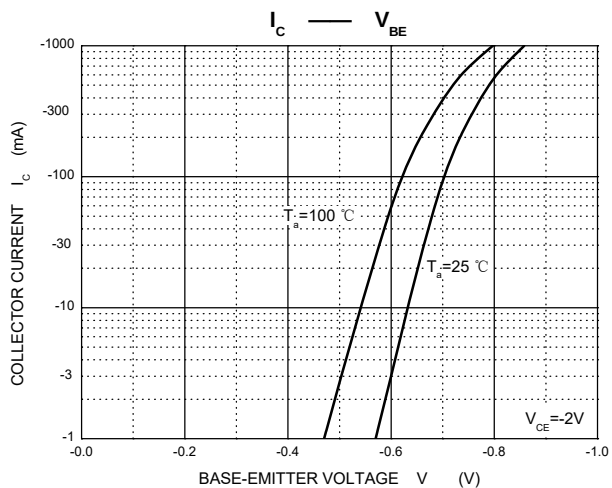
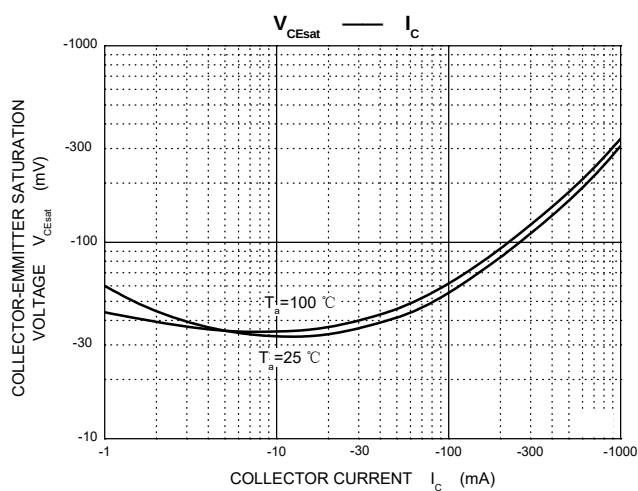
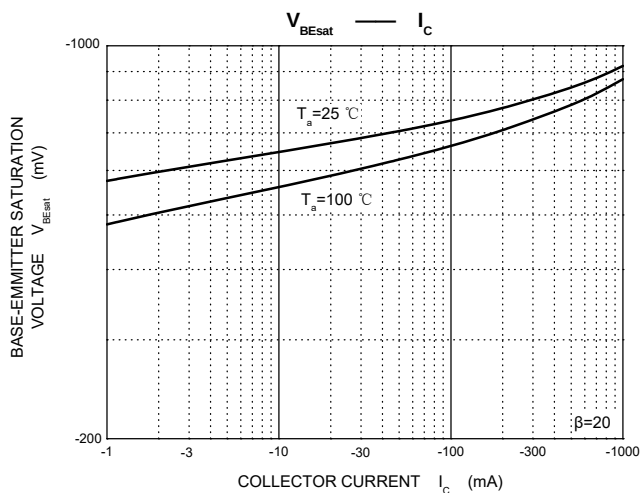
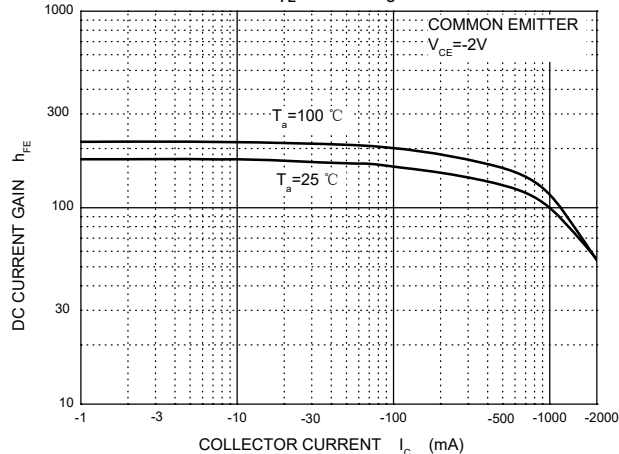


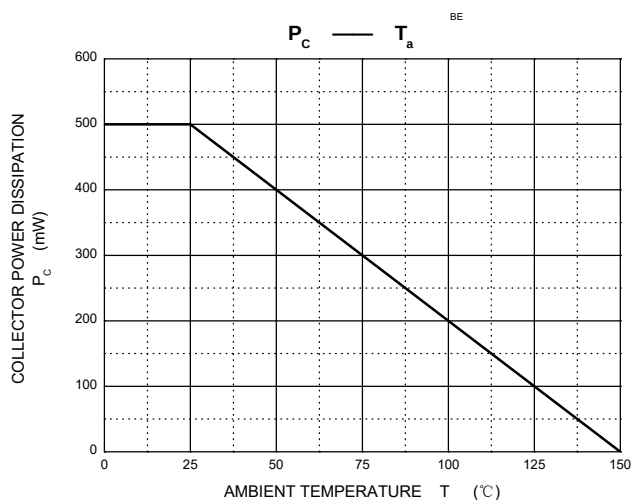
Typical Characteristics

Static Characteristic

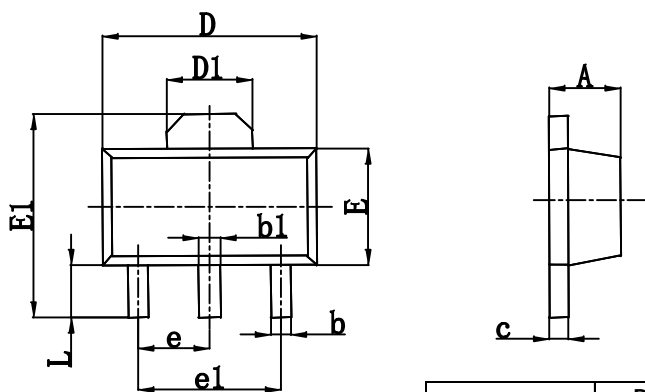


h_{FE} — I_C





SOT-89(SC-62) Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.400	1.600	0.055	0.063
b	0.320	0.520	0.013	0.020
b1	0.400	0.580	0.016	0.023
c	0.350	0.440	0.014	0.017
D	4.400	4.600	0.173	0.181
D1	1.550 REF.		0.061 REF.	
E	2.300	2.600	0.091	0.102
E1	3.940	4.250	0.155	0.167
e	1.500 TYP.		0.060 TYP.	
e1	3.000 TYP.		0.118 TYP.	
L	0.900	1.200	0.035	0.047



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