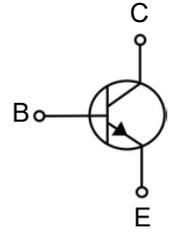
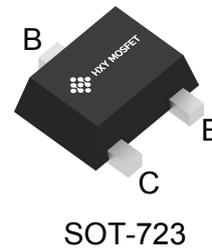




Features

Collector Power Dissipation: 100mW

Collector Current: $I_C = 150\text{mA}$



Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
2SC5658	SOT-723	BQ/BR/BS	8000

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

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	60	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current	150	mA
P_C	Collector Power Dissipation	100	mW
T_J, T_{stg}	Operation Junction And Storage Temperature Range	-55~+150	$^\circ\text{C}$

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

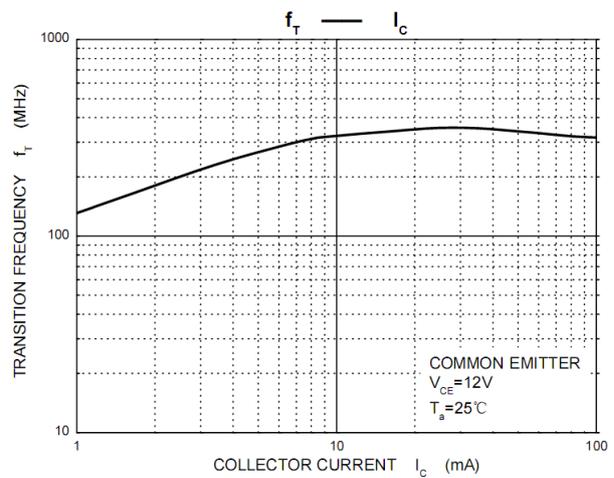
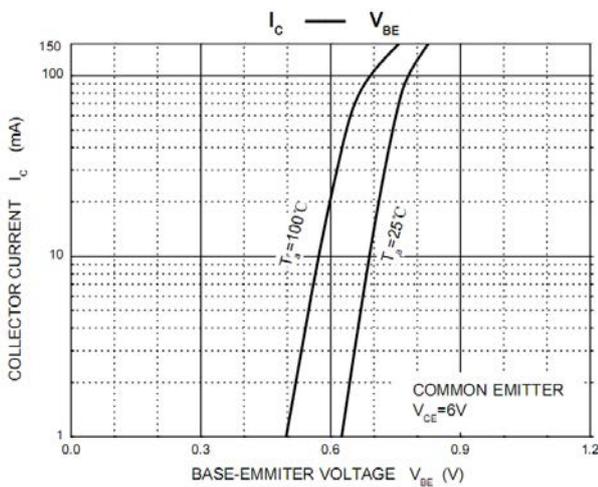
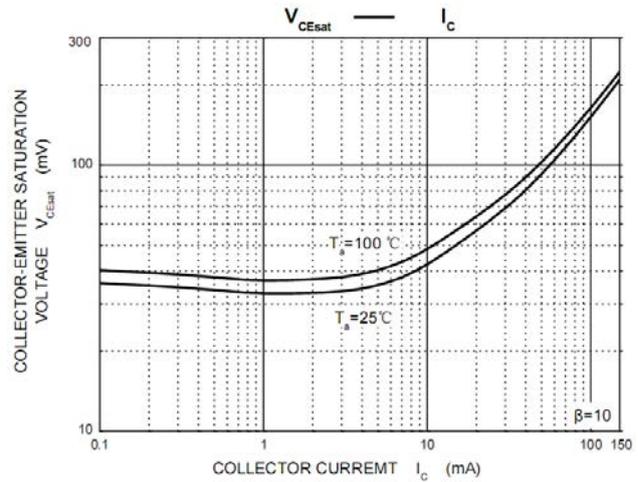
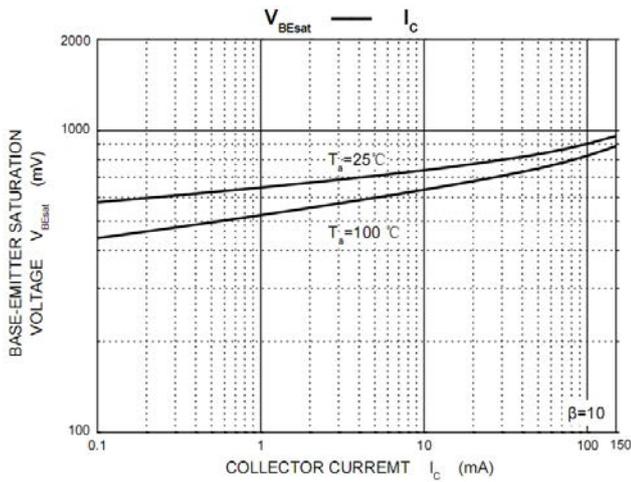
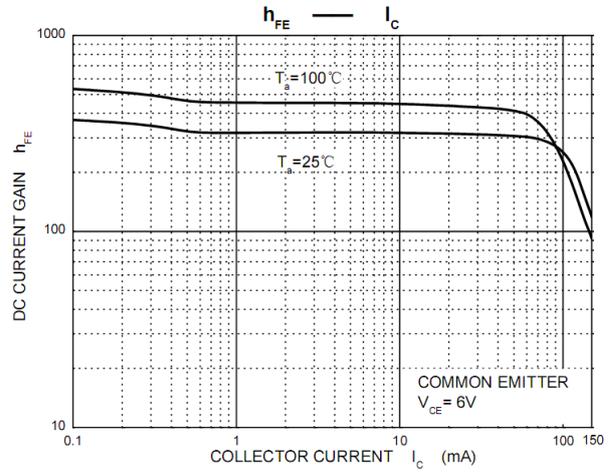
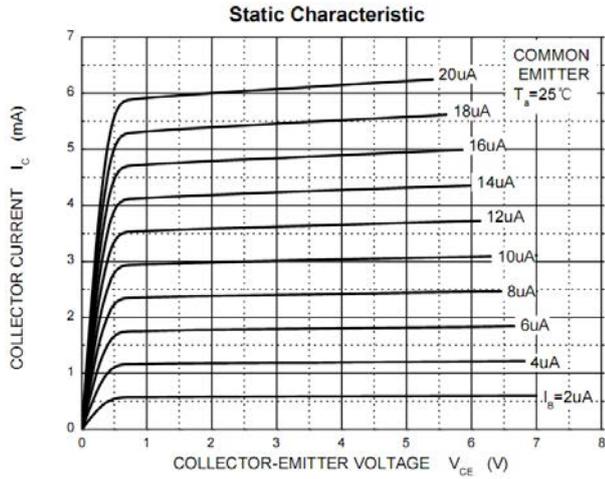
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=50\mu\text{A}, I_E=0$	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, I_B=0$	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=50\mu\text{A}, I_C=0$	7			V
Collector cut-off current	I_{CBO}	$V_{CB}=60\text{V}, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=7\text{V}, I_C=0$			0.1	μA
DC current transfer ratio	h_{FE}	$V_{CE}=6\text{V}, I_C=1\text{mA}$	120		560	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=50\text{mA}, I_B=5\text{mA}$			0.4	V
Transition frequency	f_T	$V_{CE}=12\text{V}, I_C=2\text{mA}, f=100\text{MHz}$		180		MHz
Output capacitance	C_{ob}	$V_{CB}=12\text{V}, I_E=0, f=1\text{MHz}$			3.5	pF

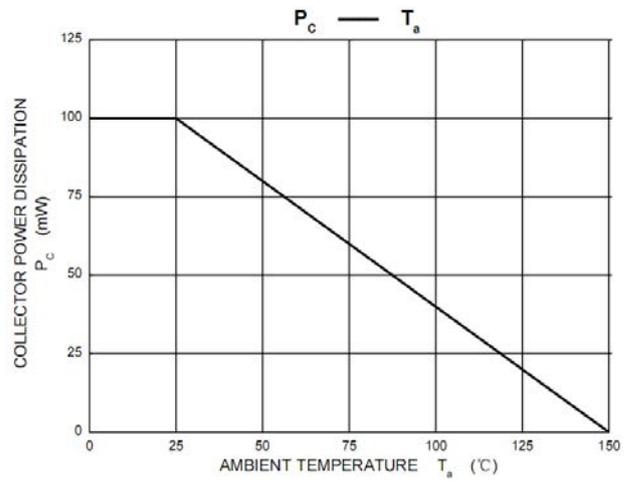
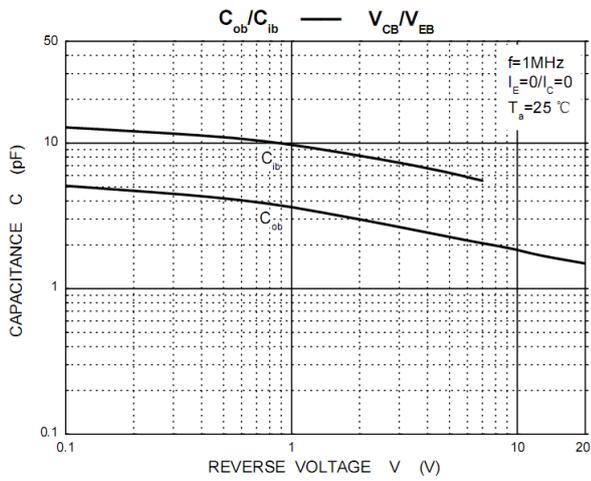
Classification Of h_{FE}

Rank	2SC5658Q	2SC5658R	2SC5658S
Range	120-270	180-390	270-560
Marking	BQ	BR	BS

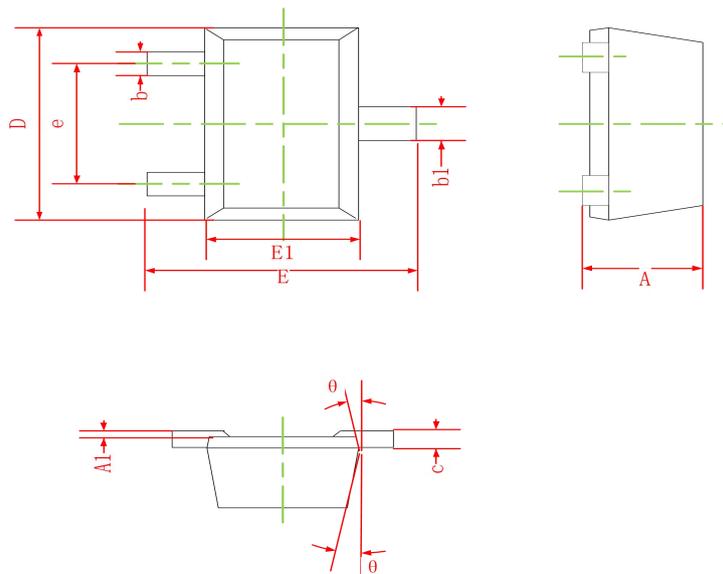


Typical Characteristics





SOT-23 Package Outline Dimensions



Symbol	Dimensions In Millimeters	
	Min.	Max.
A	0.430	0.500
A1	0.000	0.050
b	0.170	0.270
b1	0.270	0.370
c	0.080	0.150
D	1.150	1.250
E	1.150	1.250
E1	0.750	0.850
e	0.800TYP.	
θ	7° REF.	



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