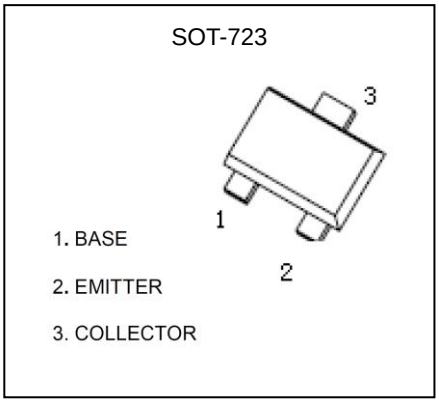
2SC5658 Transistor(NPN)



Feature

- High voltage: V_{CBO}=60V

Marking：N7

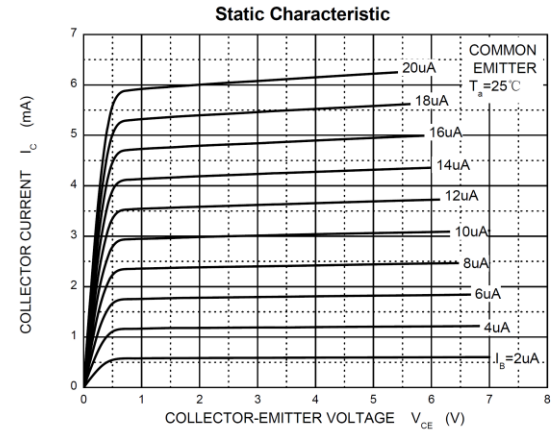
MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

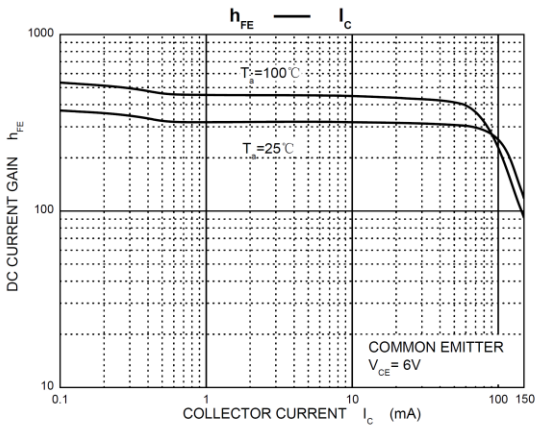
Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	7	V
Collector Current -Continuous	I_C	0.15	A
Power Dissipation	P_d	0.1	W
Junction Temperature	T_J	150	℃
Storage Temperature	T_{STG}	-45~ +125	℃

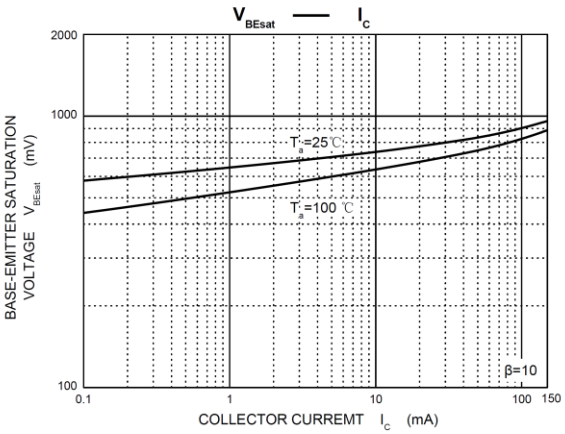
ELECTRICAL CHARACTERISTICS(T_a=25℃ unless otherwise noted)

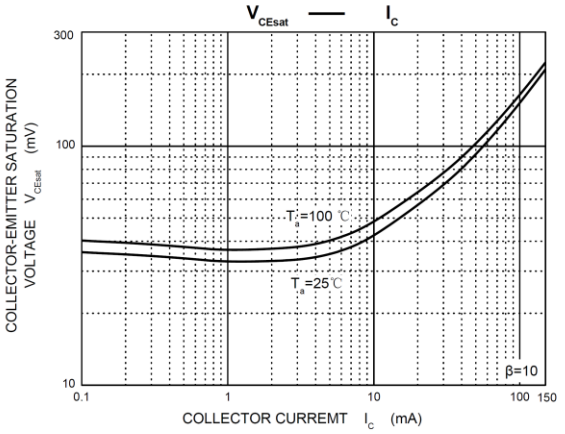
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100μA ,I_E=0	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA , I_B=0	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=10μA,I_C=0	7			V
Collector cut-off current	I_{CBO}	V_{CB}=60V, I_E=0			0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=5V, I_C=0			0.1	μA
DC current gain	h_{FE}	V_{CE}=6V, I_C=1mA	180		560	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=50mA, I_B=5mA			0.4	V
Transition frequency	f_T	V_{CE}= 12V, I_C=2mA,f=100MHz		180		MHZ
Output Capacitance	C_{ob}	V_{CB}= 12V, I_E=0,f=1MHz			3.5	pF

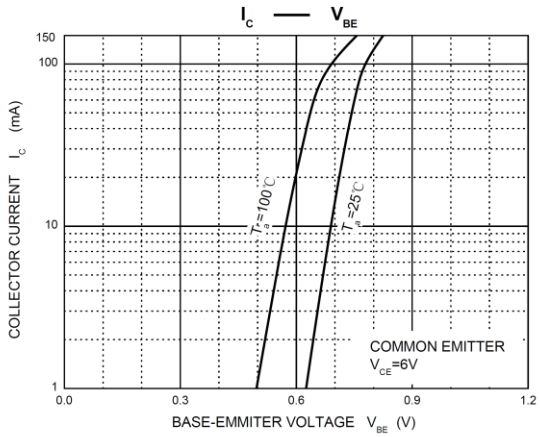
Typical Characteristics

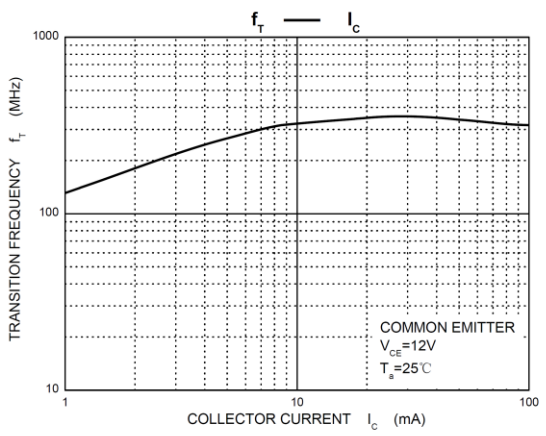


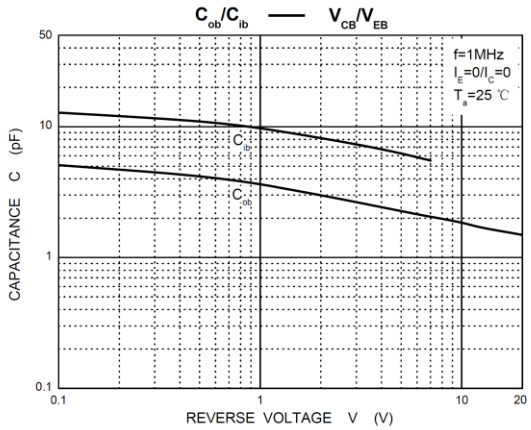


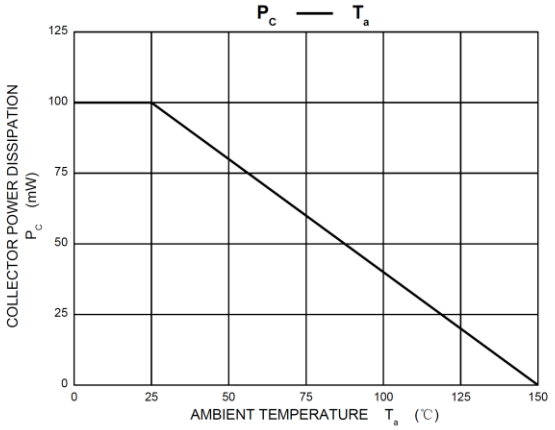




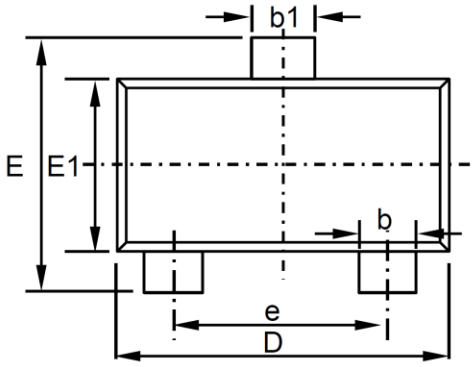


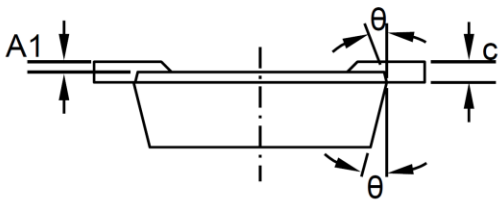


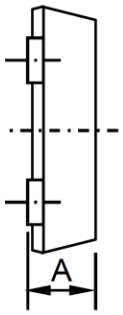




SOT-723 Package Information







SOT-723 （unit：mm）		
Dim.	Min.	Max.
A	0.40	0.50
A1	0.00	0.05
b	0.15	0.27
b1	0.20	0.37
c	0.06	0.16
D	1.10	1.30
E	1.10	1.30
E1	0.70	0.90
e	0.80 TYP.	
θ	7° REF.	