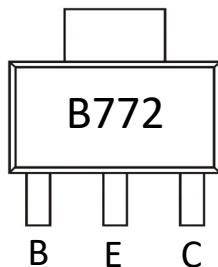


Features

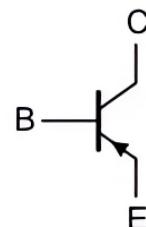
- Power Dissipation: 1.25W
- Low Collector-emitter Saturation Voltage



Marking and pin assignment



SOT-223 top view



Schematic diagram



Pb-Free



RoHS



Halogen-Free

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

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-30	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current -Continuous	-3	A
P_C	Collector Power Dissipation	1.25	W
$R_{\Theta JA}$	Thermal Resistance From Junction To Ambient	100	°C/W
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C

Ordering Information (Example)

Type	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
B772	B772	2,500	5,000	35,000	13"reel

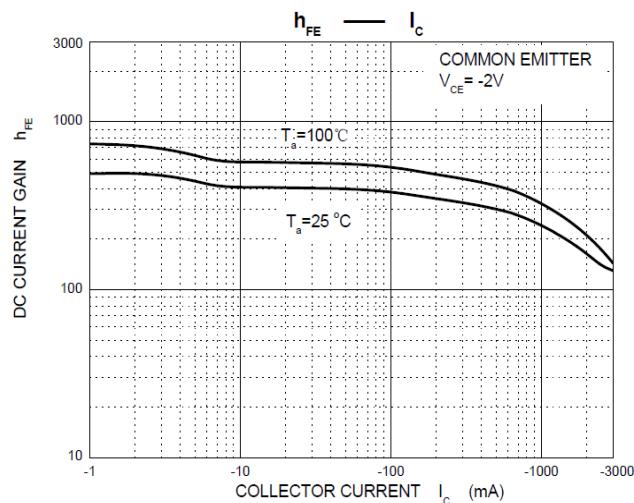
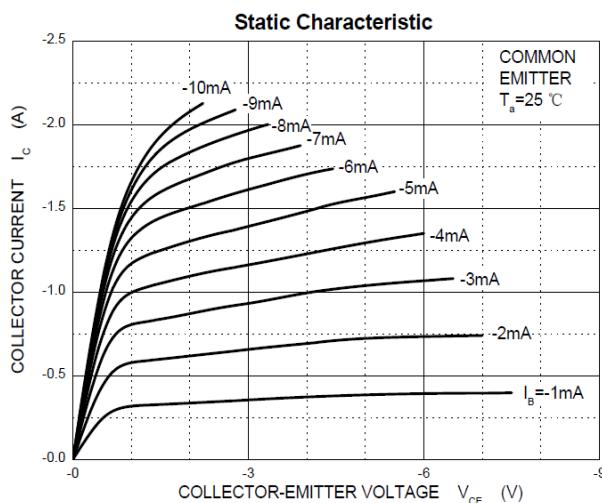
Electrical Characteristics ($T_J=25^\circ\text{C}$ unless otherwise noted)

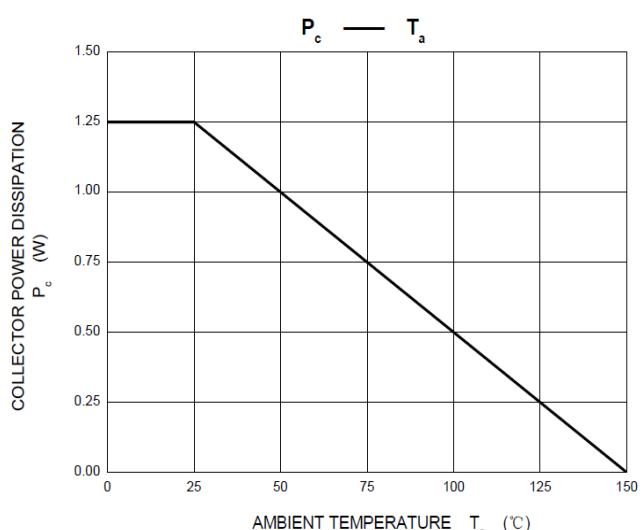
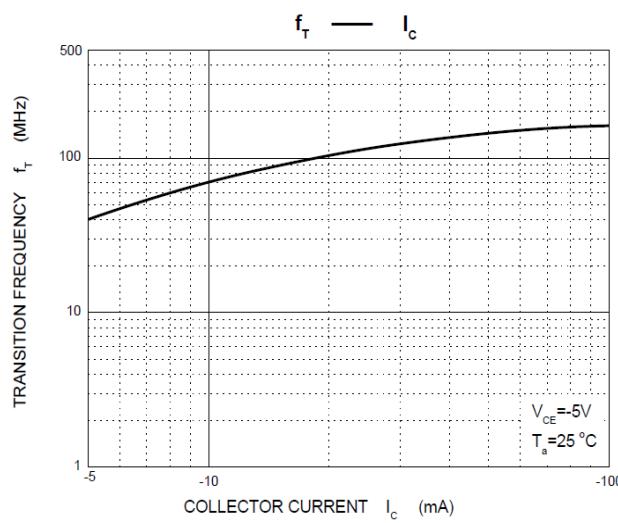
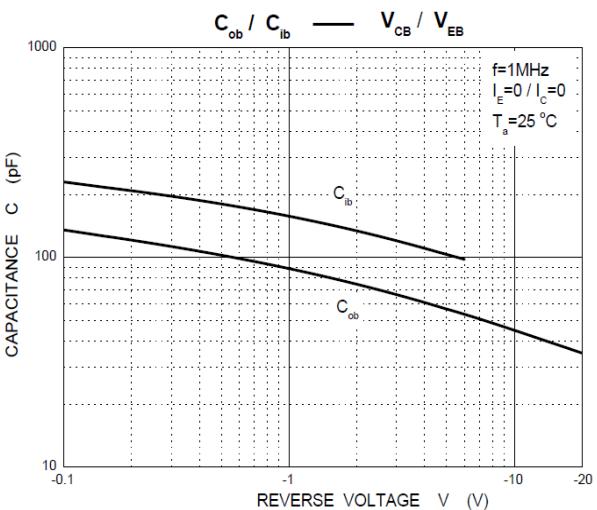
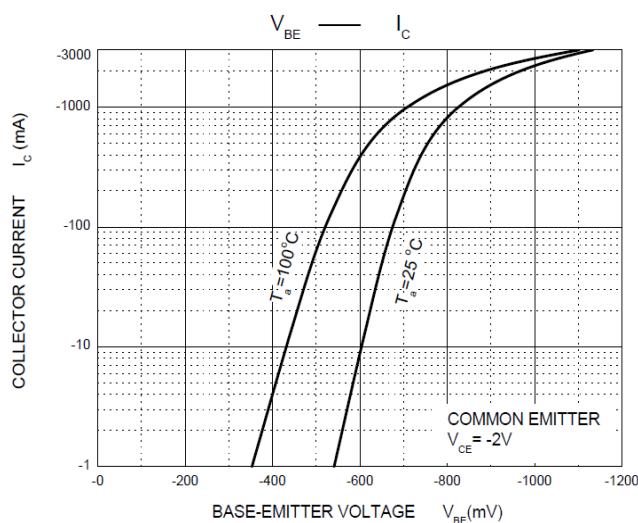
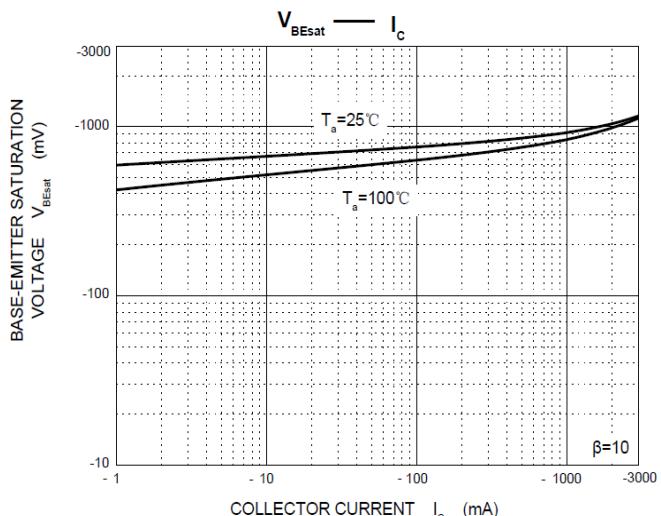
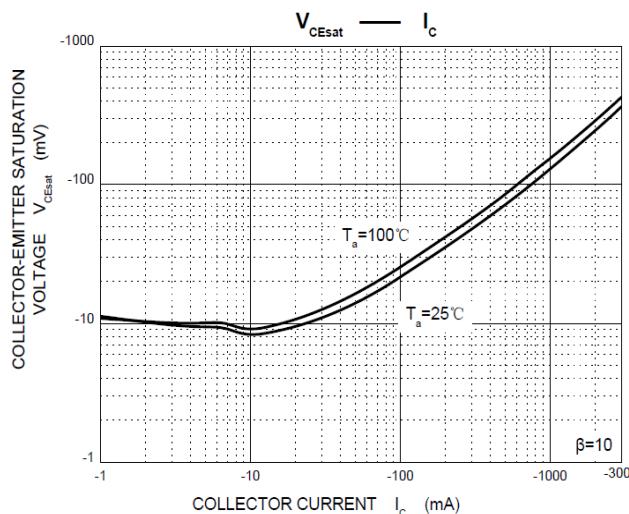
Symbol	Parameter	Condition	Min	Typ	Max	Unit
$V_{(\text{BR})\text{CBO}}$	Collector-base breakdown voltage	$I_C=-100\mu\text{A}, I_E=0$	-40	--	--	V
$V_{(\text{BR})\text{CEO}}$	Collector-emitter breakdown voltage	$I_C=-10\text{mA}, I_B=0$	-30	--	--	V
$V_{(\text{BR})\text{EBO}}$	Emitter-base breakdown voltage	$I_E=-100\mu\text{A}, I_C=0$	-6	--	--	V
I_{CBO}	Collector cut-off current	$V_{\text{CB}}=-40\text{V}, I_E=0$	--	--	-1	μA
I_{CEO}	Collector cut-off current	$V_{\text{CE}}=-30\text{V}, I_B=0$	--	--	-10	μA
I_{EBO}	Emitter cut-off current	$V_{\text{EB}}=-6\text{V}, I_C=0$	--	--	-1	μA
$h_{\text{FE}1}$	DC current gain	$V_{\text{CE}}=-2\text{V}, I_C=-1\text{A}$	60	--	400	--
$h_{\text{FE}2}$		$V_{\text{CE}}=-2\text{V}, I_C=-100\text{mA}$	32	--	--	
$V_{\text{CE(sat)}}$	Collector-emitter saturation voltage	$I_C=-2\text{A}, I_B=-0.2\text{A}$	--	--	-0.5	V
$V_{\text{BE(sat)}}$	Base-emitter saturation voltage	$I_C=-2\text{A}, I_B=-0.2\text{A}$	--	--	-1.5	V
f_T	Transition frequency	$V_{\text{CE}}=-5\text{V}, I_C=-0.1\text{A}, f=10\text{MHz}$	50	80	--	MHz

CLASSIFICATION of hFE

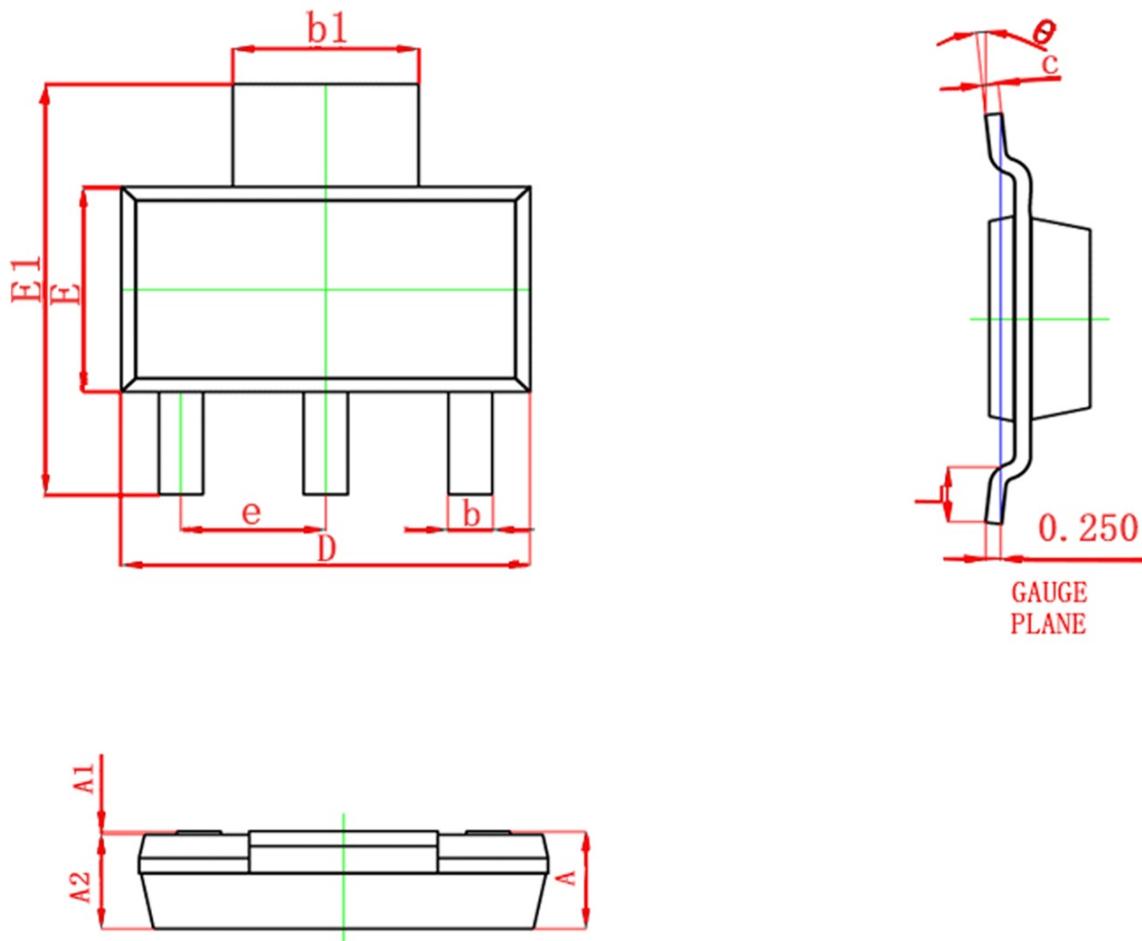
Rank	R	O	Y	GR
Range	60-120	100-200	160-320	200-400

Typical Characteristics





SOT-223 Package information



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	--	1.800	--	0.071
A1	0.020	0.100	0.001	0.004
A2	1.500	1.700	0.059	0.067
b	0.660	0.840	0.026	0.033
b1	2.900	3.100	0.114	0.122
c	0.230	0.350	0.009	0.014
D	6.300	6.700	0.248	0.264
E	3.300	3.700	0.130	0.146
E1	6.700	7.300	0.264	0.287
e	2.300(BSC)		0.091(BSC)	
L	0.750	--	0.030	--
theta	0°	10°	0°	10°