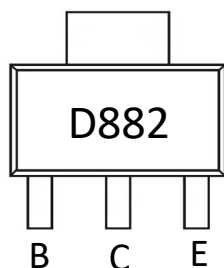
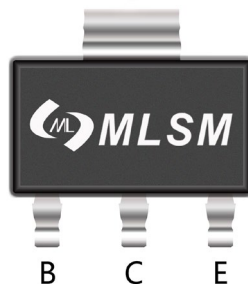


Features

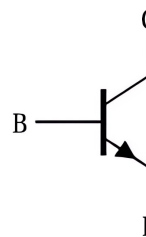
- Power Dissipation:1.25W
- Low Collector-emitter Saturation Voltage



Marking and pin assignment



SOT-223 top view



Schematic diagram



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
$P_C^{①}$	Collector Power Dissipation	1.25	W
$R_{\theta JA}^{①}$	Thermal Resistance From Junction To Ambient	100	°C/W
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C

Notes: 1.Device mounted on 1 in2 FR-4 board in a still air environment with TA=25 °C.

Ordering Information (Example)

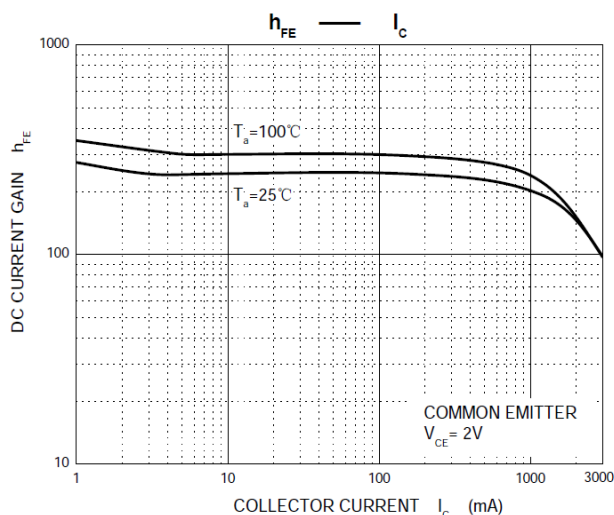
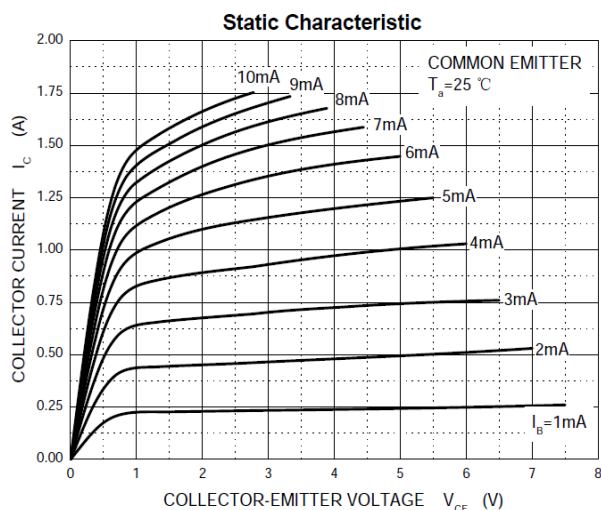
Type	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
D882	D882	2,500	5,000	35,000	13"reel

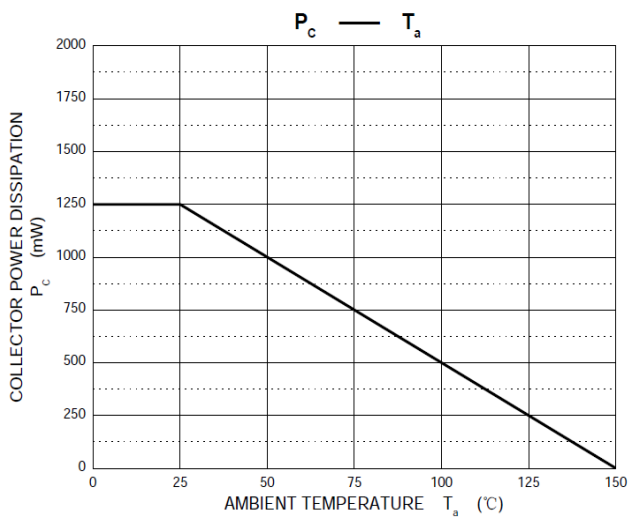
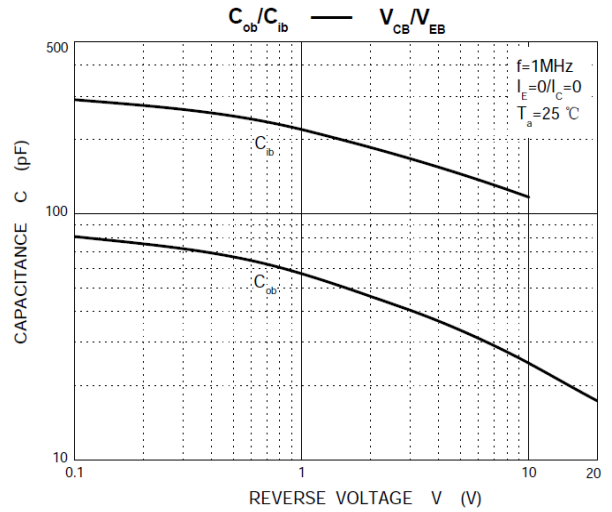
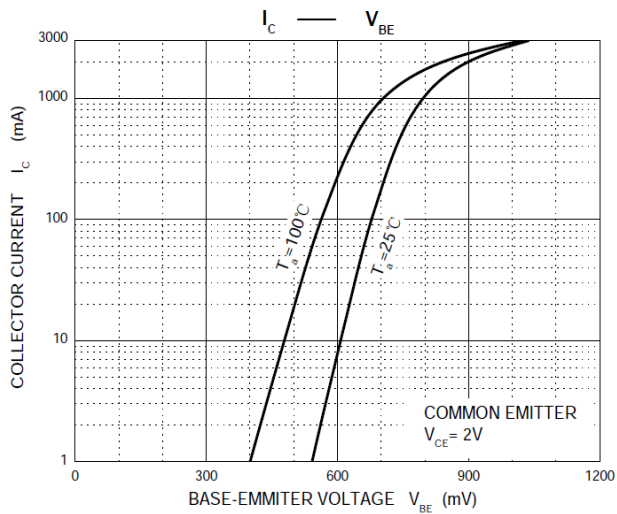
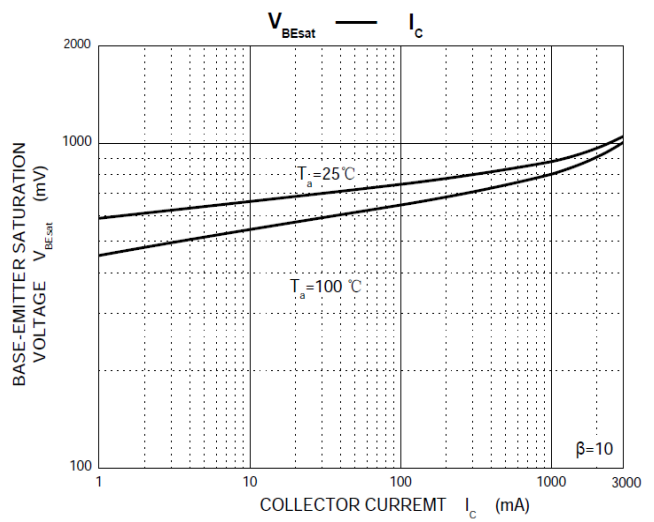
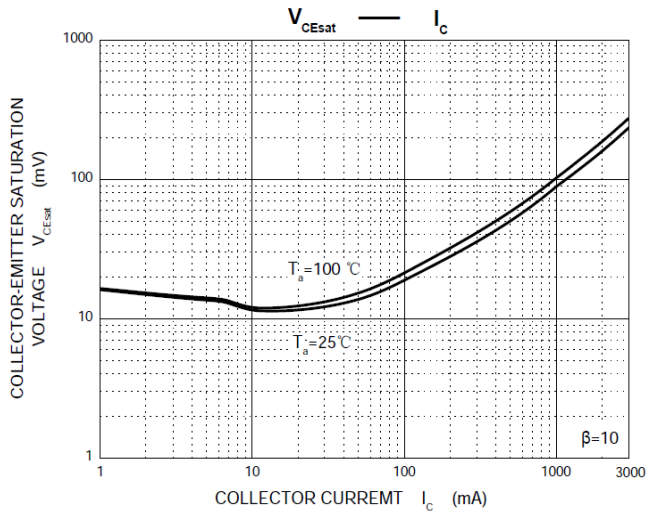
Electrical Characteristics (T_J=25°C unless otherwise noted)

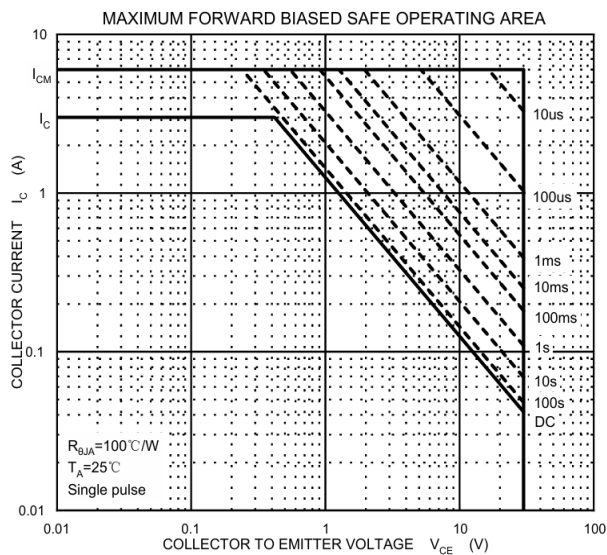
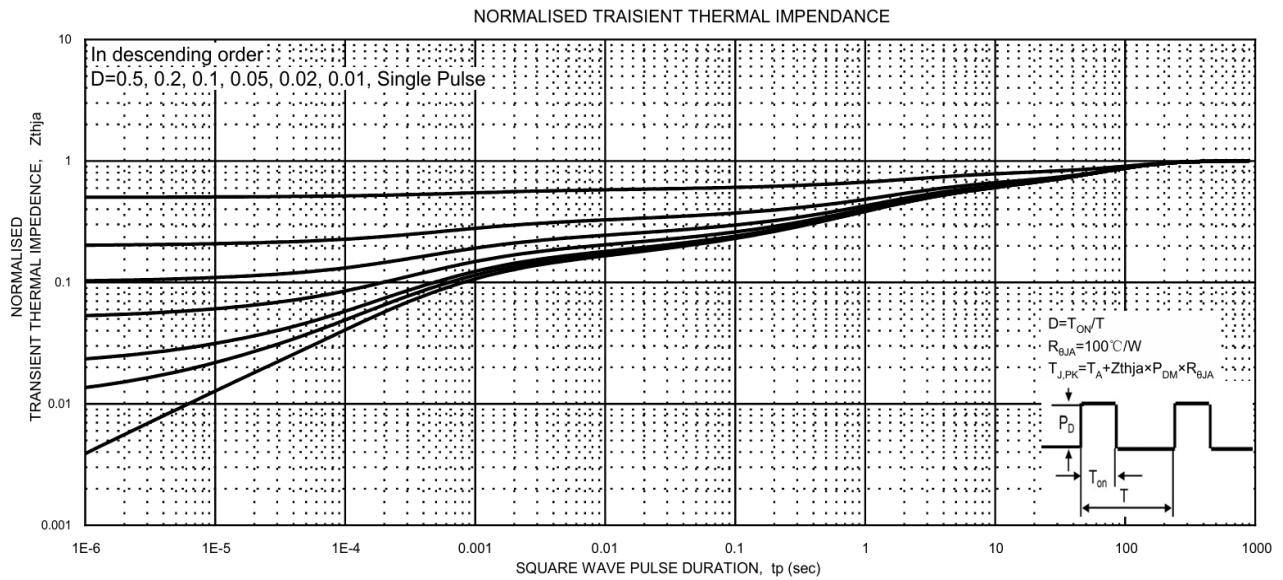
Symbol	Parameter	Condition	Min	Typ	Max	Unit
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =100μA, I _E =0	40	--	--	V
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =10mA, I _B =0	30	--	--	V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =100μA, I _C =0	6	--	--	V
I _{CBO}	Collector cut-off current	V _{CB} =40V, I _E =0	--	--	1	μA
I _{CEO}	Collector cut-off current	V _{CE} =30V, I _B =0	--	--	10	μA
I _{EBO}	Emitter cut-off current	V _{EB} =6V, I _C =0	--	--	1	μA
h _{FE1}	DC current gain	V _{CE} =2V, I _C =1A	60	--	400	--
h _{FE2}		V _{CE} =2V, I _C =100mA	32	--	--	
V _{CE(sat)}	Collector-emitter saturation voltage	I _C =2A, I _B =0.2A	--	--	0.5	V
V _{BE(sat)}	Base-emitter saturation voltage	I _C =2A, I _B =0.2A	--	--	1.5	V
f _T	Transition frequency	V _{CE} =5V, I _C =0.1A, f=10MHz	50	--	--	MHz

Classification of h_{FE}

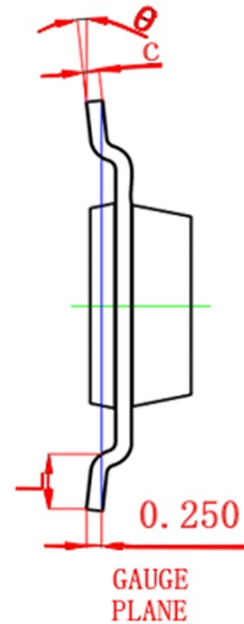
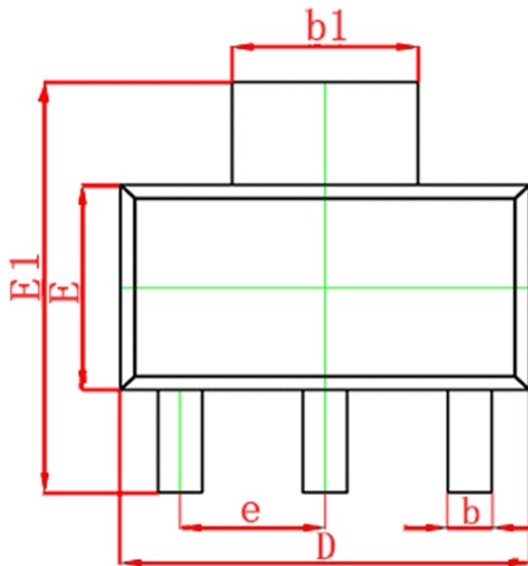
Rank	R	O	Y	GR
Range	60-120	100-200	160-320	200-400

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	--
θ	0°	10°	0°	10°