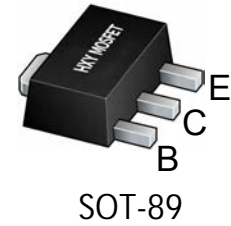




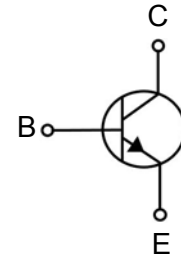
Features

Low saturation voltage, typically
VCE(sat)=350mV at IC/IB=1A/50mA



Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
2SD2391	SOT-89	2SD2391U	1000



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

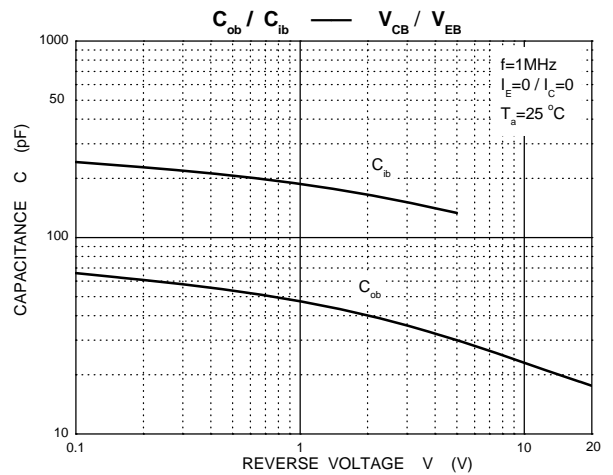
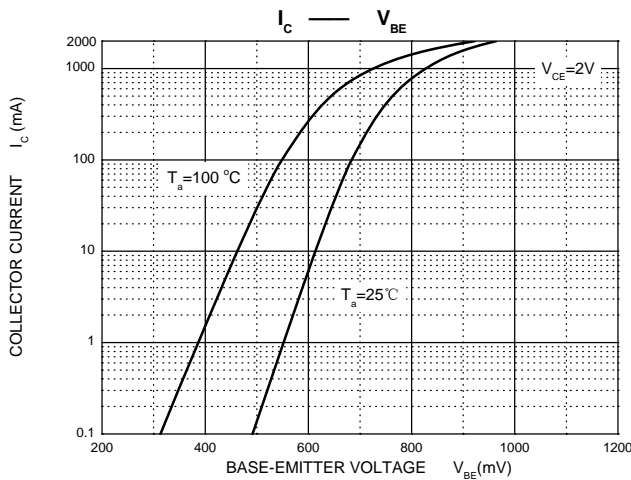
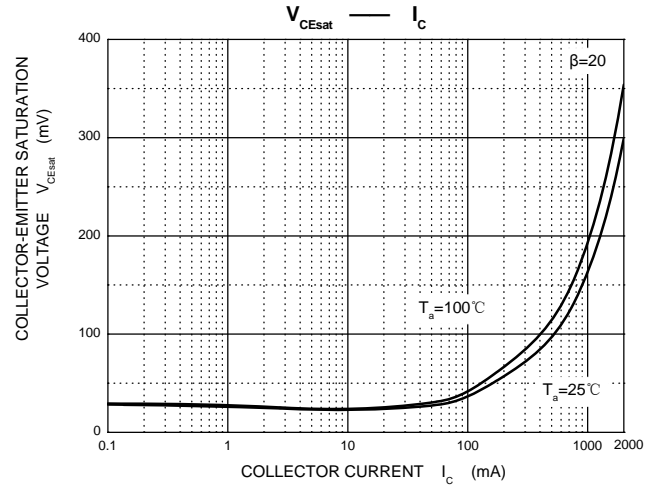
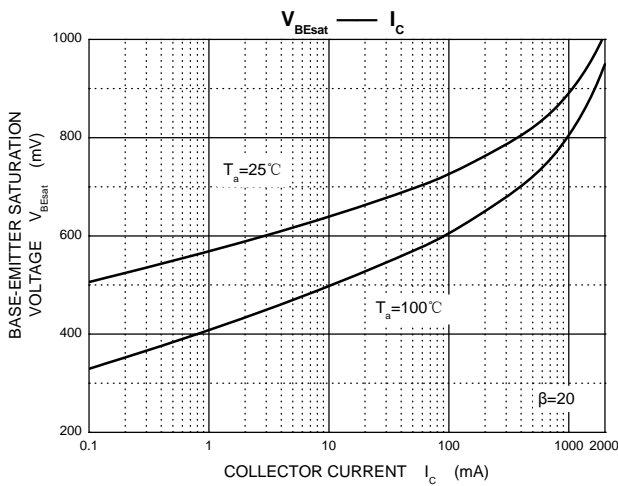
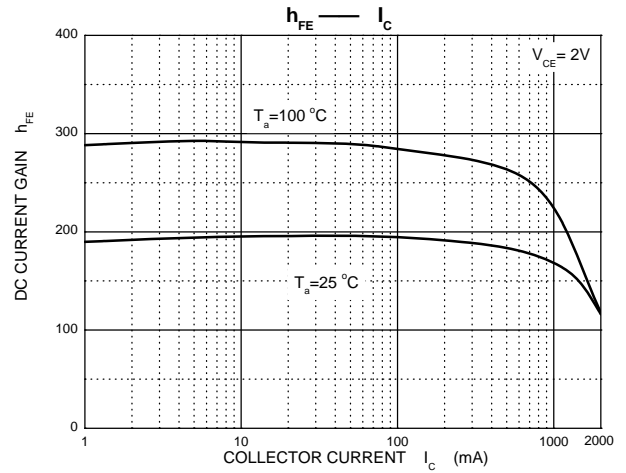
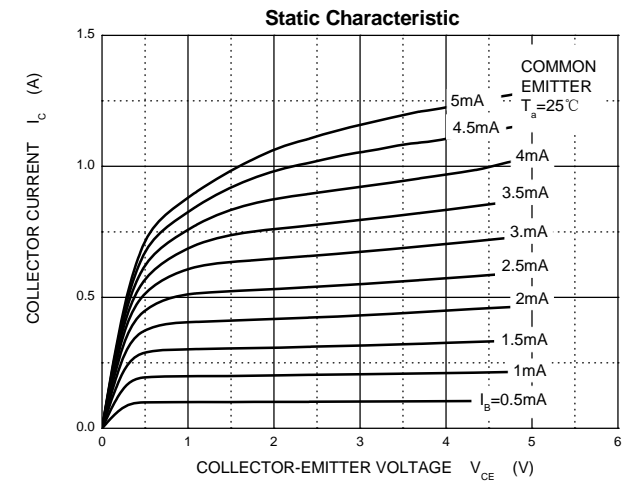
Parameter	Symbol	Value	Unit
Collector Base Voltage	V _{CB0}	60	V
Collector Emitter Voltage	V _{CEO}	60	V
Emitter Base Voltage	V _{EBO}	6	V
Collector Current	I _C	2	A
Peak Collector Current (P _w = 10 ms)	I _{CP}	6	A
Total Power Dissipation	P _{tot}	0.5 ¹⁾ 2 ²⁾	W
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	- 55 to + 150	°C

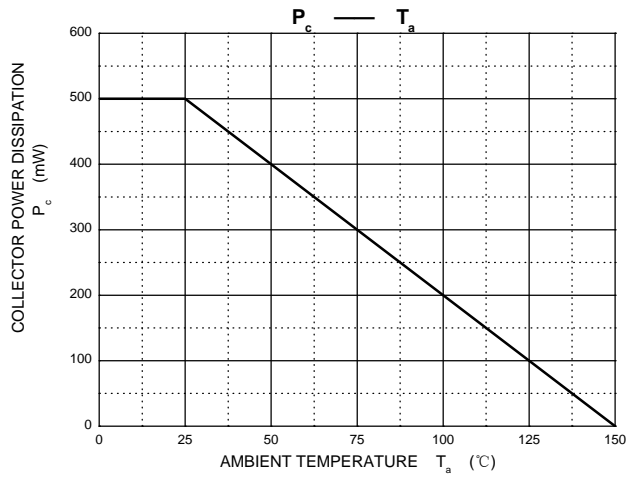
Electrcal Charcteristics (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =50μA, I _E =0	60			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =1mA, I _B =0	60			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =50μA, I _C =0	6			V
Collector cut-off current	I _{CBO}	V _{CB} =50V, 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(1)}	V _{CE} =2V, I _C =0.5A	120		270	
	h _{FE(2)}	V _{CE} =2V, I _C =1.5A	45			
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =1A, I _B =50mA			0.35	V
Transition frequency	f _T	V _{CE} =2V, I _C =0.5A, f=100MHz		210		MHz
Output capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz		15		pF



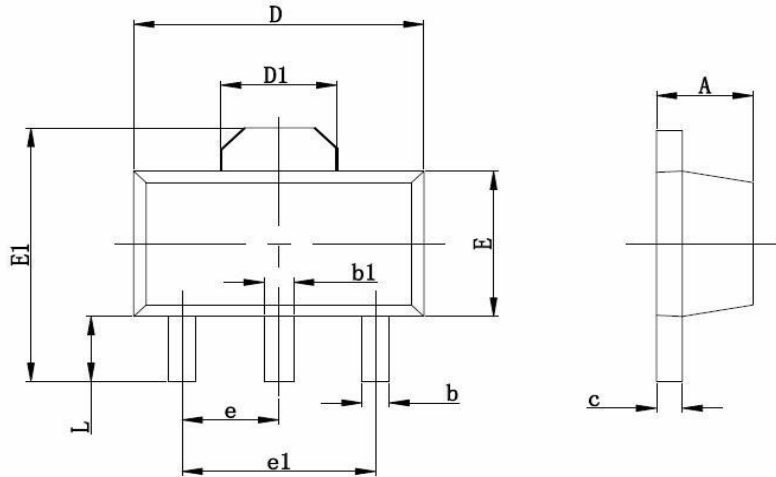
Typical Characteristics







SOT-89 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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