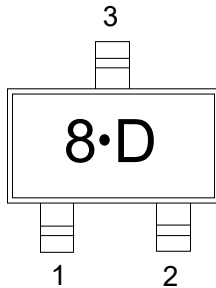


Features

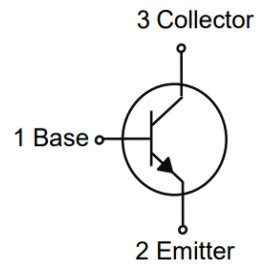
- Power switching applications



Marking and pin assignment



SOT-23 top view



Schematic diagram



Pb-Free



Halogen-Free

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

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	600	V
V_{CEO}	Collector-Emitter Voltage	400	V
V_{EBO}	Emitter-Base Voltage	8	V
I_C	Collector Current	250	mA
P_C	Collector Power Dissipation	625	mW
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-50~+150	°C

Ordering Information (Example)

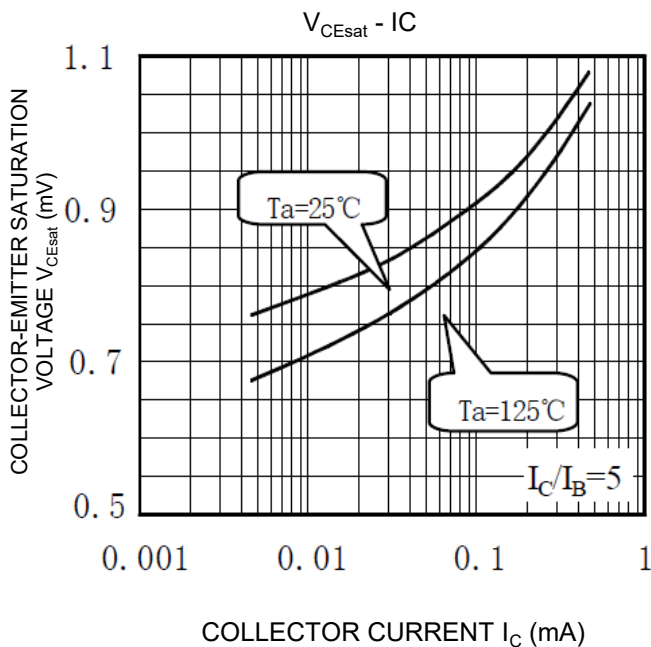
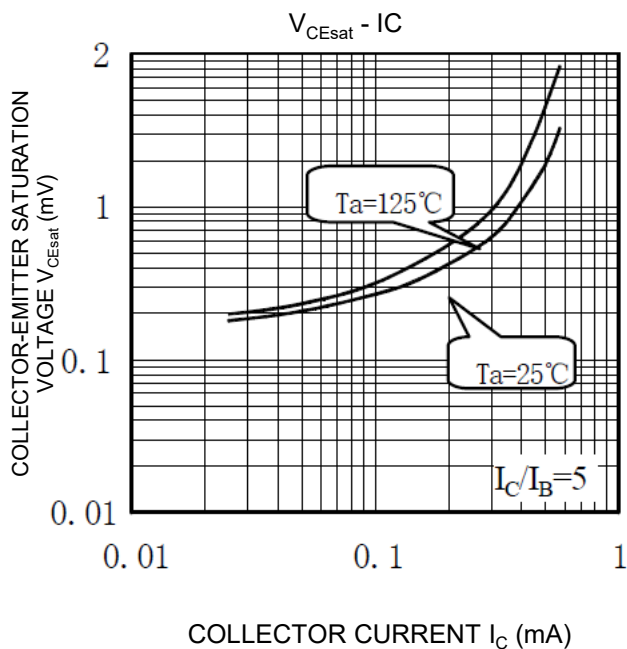
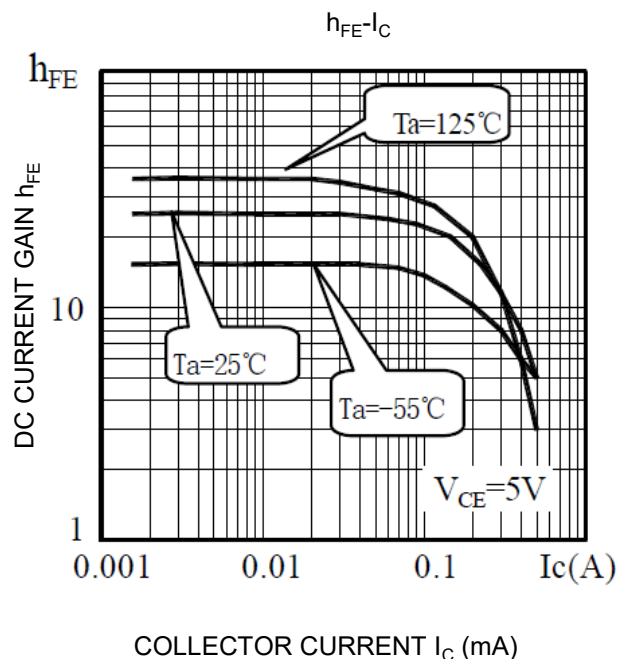
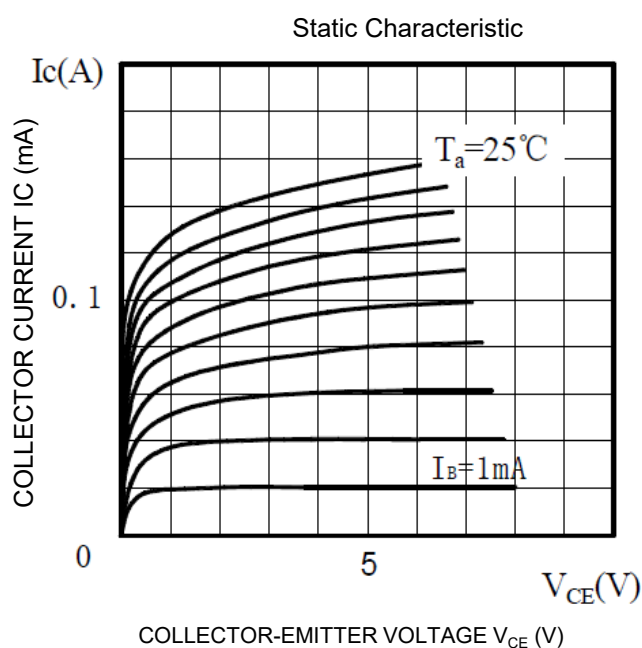
Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
13001A	SOT-23	8·D	3,000	45,000	180,000	7"reel

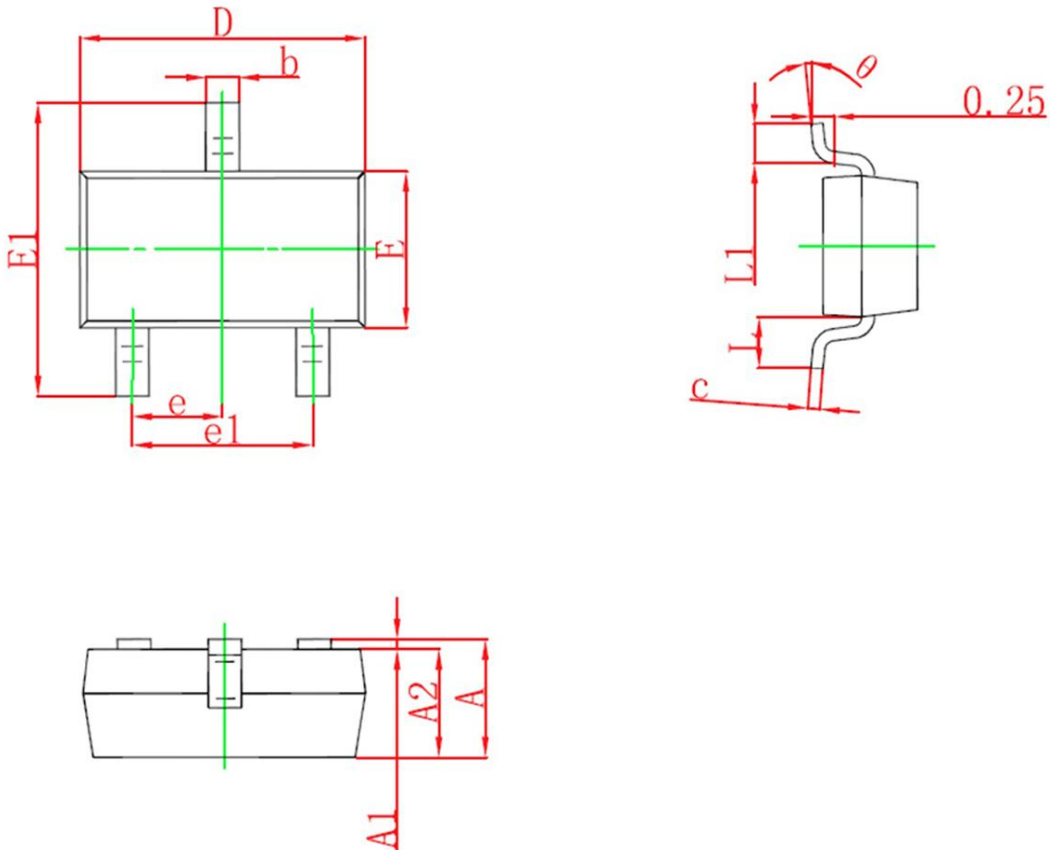


Electrical Characteristics (T_J=25°C unless otherwise noted)

Symbol	Parameter	Condition	Min	Typ	Max	Unit
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =1mA, I _E =0	600	--	--	V
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =1mA, I _B =0	400	--	--	V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =100μA, I _C =0	8	--	--	V
I _{CBO}	Collector cut-off current	V _{CB} =600V, I _E =0	--	--	100	μA
I _{CEO}	Collector cut-off current	V _{CE} =400V, I _B =0	--	--	100	μA
I _{EBO}	Emitter cut-off current	V _{EB} = 5V, I _C =0	--	--	100	μA
h _{FE}	DC current gain	V _{CE} =20V, I _C = 20mA	15	--	30	
		V _{CE} =10V, I _C = 0.25mA	5	--	--	
		V _{CE} =5V, I _C = 500mA	1	--	--	
V _{CE(sat)}	Collector-emitter saturation voltage	I _C =50 mA, I _B = 10mA	--	--	0.4	V
V _{BE(sat)}	Base-emitter saturation voltage	I _C =50 mA, I _B = 10mA	--	--	1.1	V
f _T	Transition frequency	V _{CE} =20V, I _C = 20mA f=30MHz	8	--	--	MHz

Typical Operating Characteristics



SOT-23 Package information


Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E1	2.250	2.550	0.088	0.100
E	1.200	1.400	0.047	0.055
e	0.950TYP		0.037TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°