



Features

- Power Switching Applications

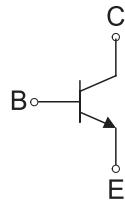


Package Marking and Ordering Information

Product ID	Pack	Packing Method	Qty(PCS)
ST13003-K	TO-126	Bulk	200

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

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	700	V
V _{CEO}	Collector-Emitter Voltage	500	V
V _{EBO}	Emitter-Base Voltage	9	V
I _C	Collector Current -Continuous	1.5	A
P _c	Collector Dissipation	1.25	W
T _J , T _{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C

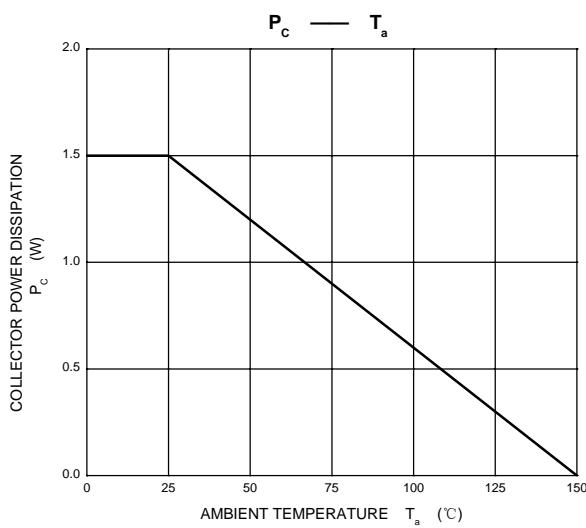
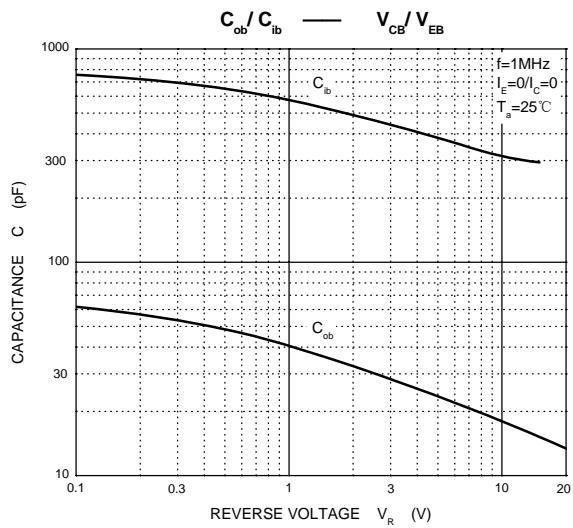
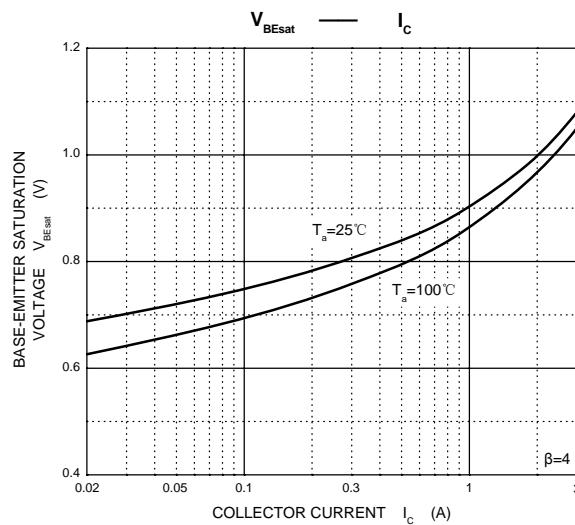
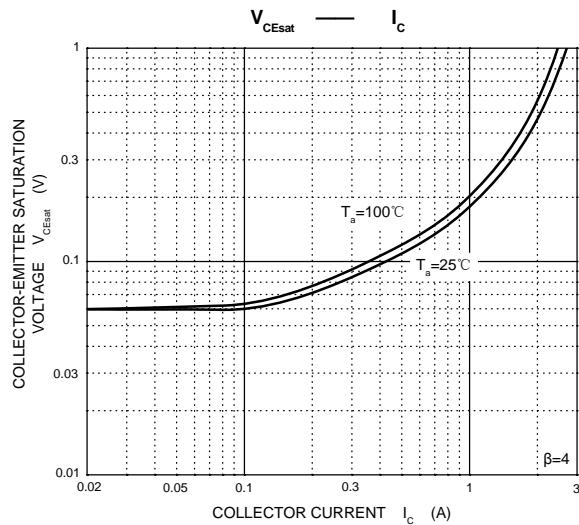
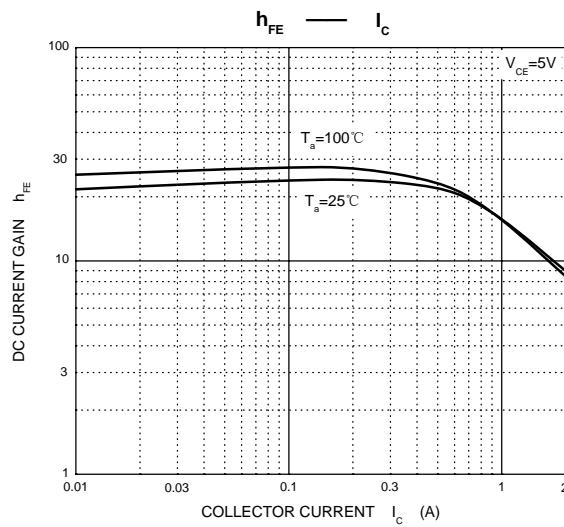
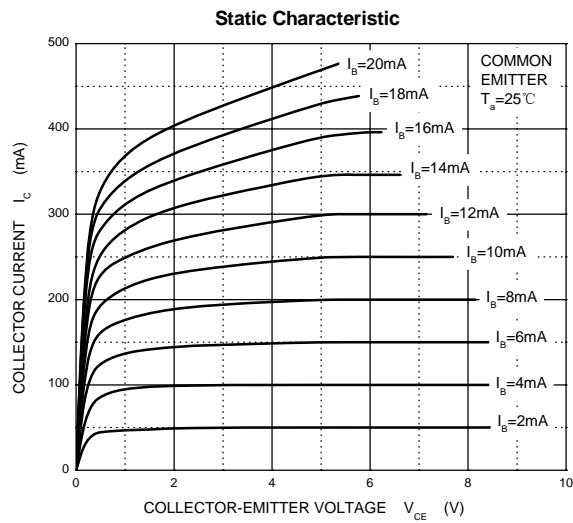


Electrical Characteristics(Ta=25°C unless otherwise specified)

Parameter	symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =5mA, I _E =0	700		V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =10mA, I _B =0	500		V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =2mA, I _C =0	9		V
Collector cut-off current	I _{CBO}	V _{CB} =680V, I _E =0		1	mA
Collector cut-off current	I _{CEO}	V _{CE} =410V, I _B =0		0.5	mA
Emitter cut-off current	I _{EBO}	V _{EB} =7V, I _C =0		1	mA
DC current gain	h _{FE1}	V _{CE} =5V, I _C = 0.2 A	20	25	
	h _{FE2}	V _{CE} =5V, I _C = 1A	5		
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =1A, I _B =0.2A		0.6	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =1A, I _B =0.2A		1.2	V
Transition frequency	f _T	V _{CE} =10V, I _C =100mA, f =1MHz	5		MHz
Storage time	t _s	I _C =250mA	2	4	μs

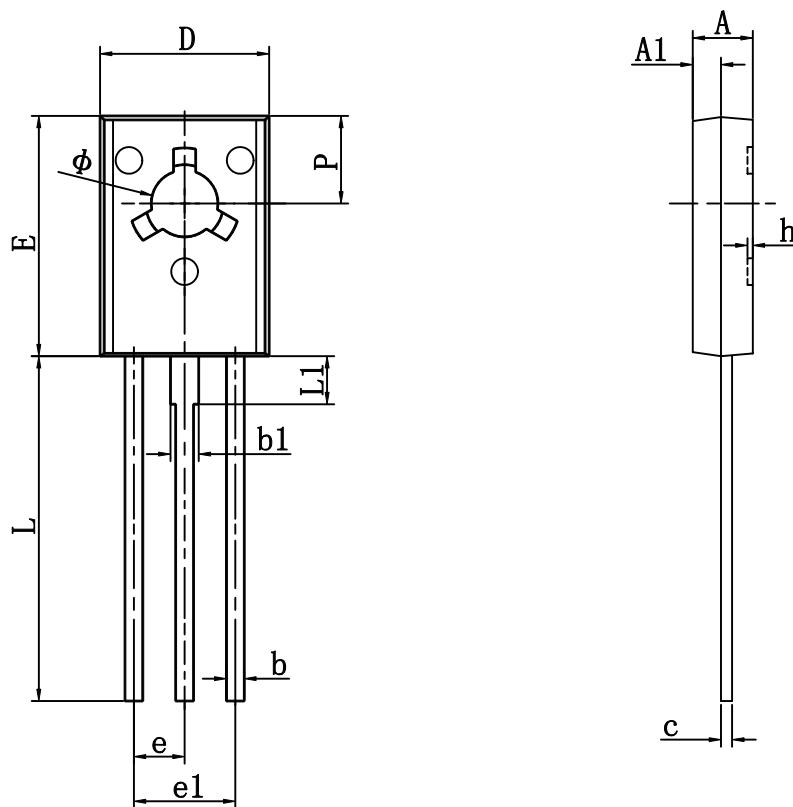


Typical Characteristics





TO-126 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	2.500	2.900	0.098	0.114
A1	1.100	1.500	0.043	0.059
b	0.660	0.860	0.026	0.034
b1	1.170	1.370	0.046	0.054
c	0.450	0.600	0.018	0.024
D	7.400	7.800	0.291	0.307
E	10.600	11.000	0.417	0.433
e	2.290 TYP		0.090 TYP	
e1	4.480	4.680	0.176	0.184
h	0.000	0.300	0.000	0.012
L	15.300	15.700	0.602	0.618
L1	2.100	2.300	0.083	0.091
P	3.900	4.100	0.154	0.161
Φ	3.000	3.200	0.118	0.126



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