



## Features

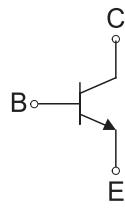
- Power Switching Applications

## Package Marking and Ordering Information

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



TO-126



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

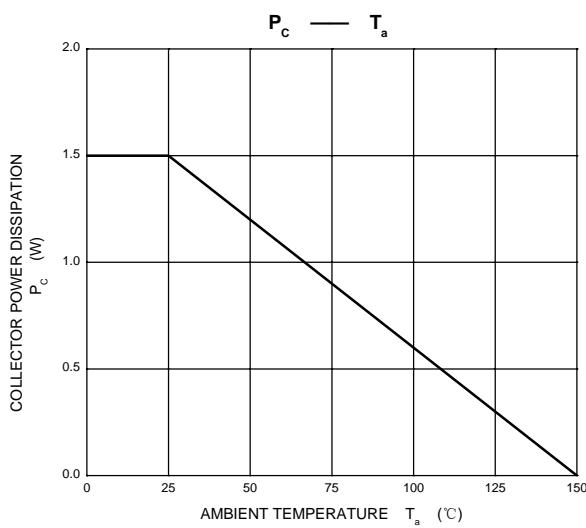
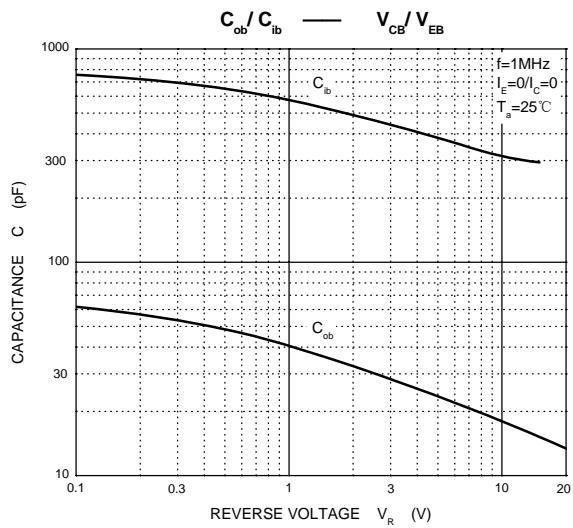
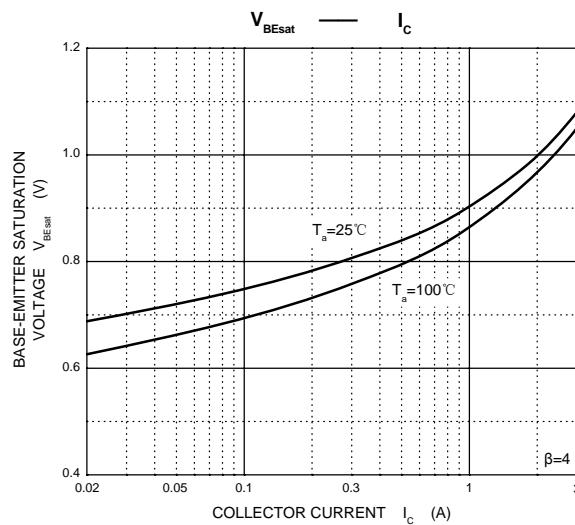
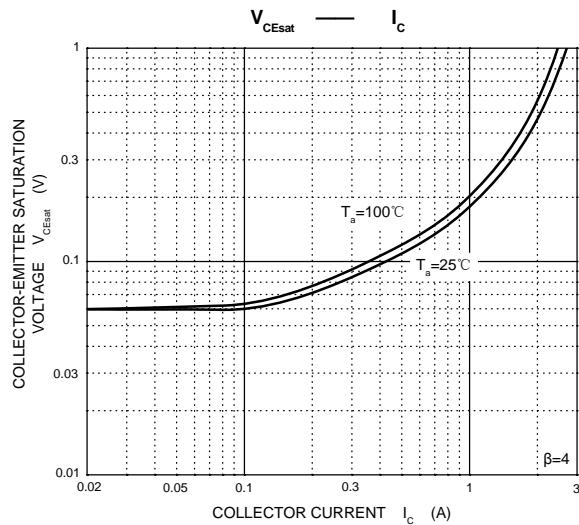
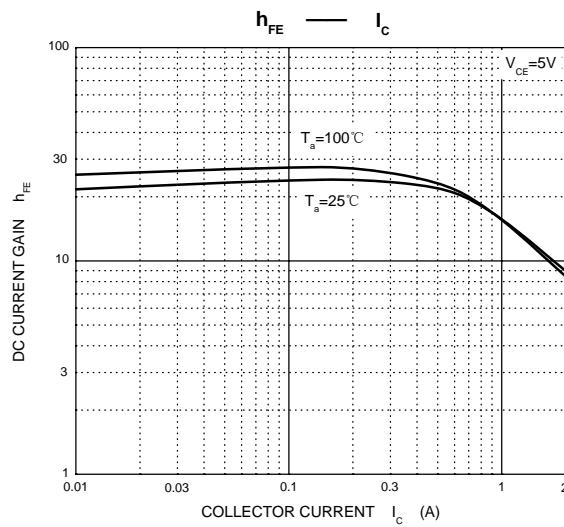
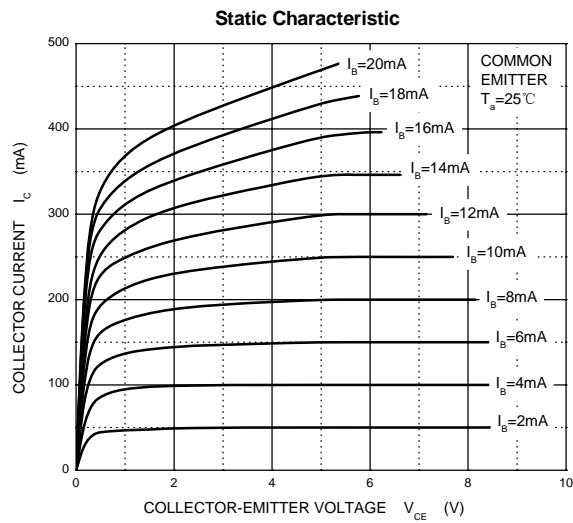
Symbol	Parameter	Value	Unit
V <sub>CBO</sub>	Collector-Base Voltage	700	V
V <sub>CEO</sub>	Collector-Emitter Voltage	500	V
V <sub>EBO</sub>	Emitter-Base Voltage	9	V
I <sub>C</sub>	Collector Current -Continuous	1.5	A
P <sub>c</sub>	Collector Dissipation	1.25	W
T <sub>J</sub> , T <sub>stg</sub>	Operation 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 <sub>(BR)CBO</sub>	I <sub>C</sub> =5mA, I <sub>E</sub> =0	700		V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =0	500		V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =2mA, I <sub>C</sub> =0	9		V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =680V, I <sub>E</sub> =0		1	mA
Collector cut-off current	I <sub>CEO</sub>	V <sub>CE</sub> =410V, I <sub>B</sub> =0		0.5	mA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =7V, I <sub>C</sub> =0		1	mA
DC current gain	h <sub>FE1</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> = 0.2 A	20	25	
	h <sub>FE2</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> = 1A	5		
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =1A, I <sub>B</sub> =0.2A		0.6	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =1A, I <sub>B</sub> =0.2A		1.2	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =100mA, f =1MHz	5		MHz
Storage time	t <sub>s</sub>	I <sub>C</sub> =250mA	2	4	μs

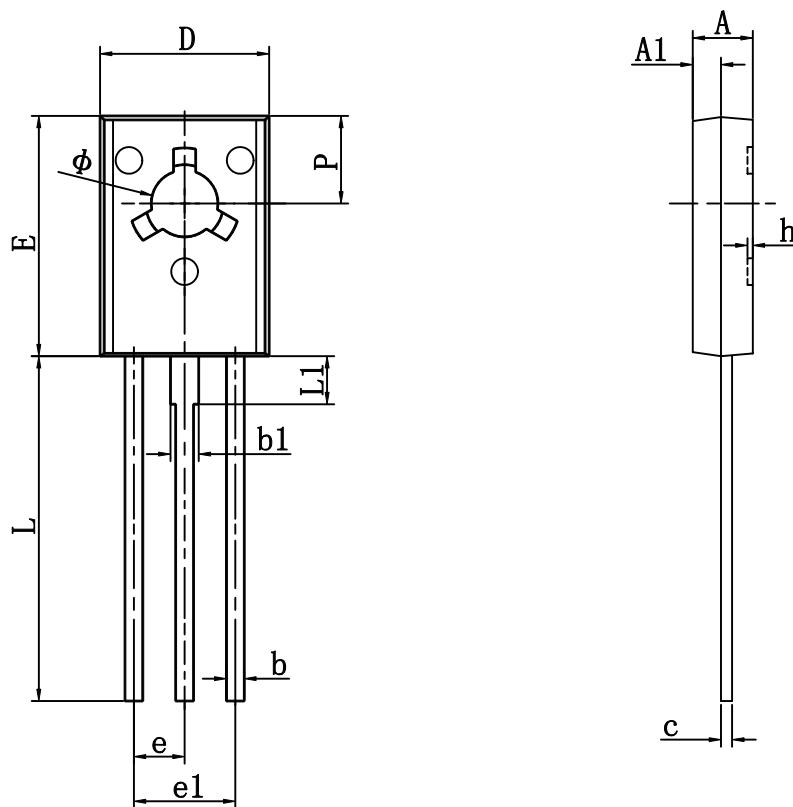


## Typical Characteristics





## 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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