

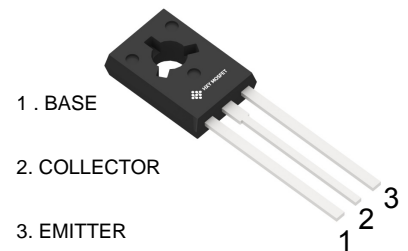


Features

- High Current

Package Marking and Ordering Information

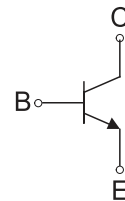
Product ID	Pack	Packing Method	Qty(PCS)
BD13516STU	TO-126	Bulk	200



TO-126

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

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	45	V
V_{CEO}	Collector-Emitter Voltage	45	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current -Continuous	1.5	A
P_c	Collector Dissipation	1	W
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C



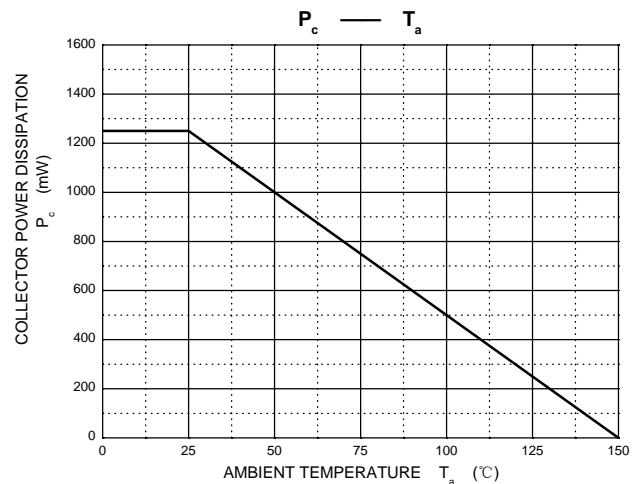
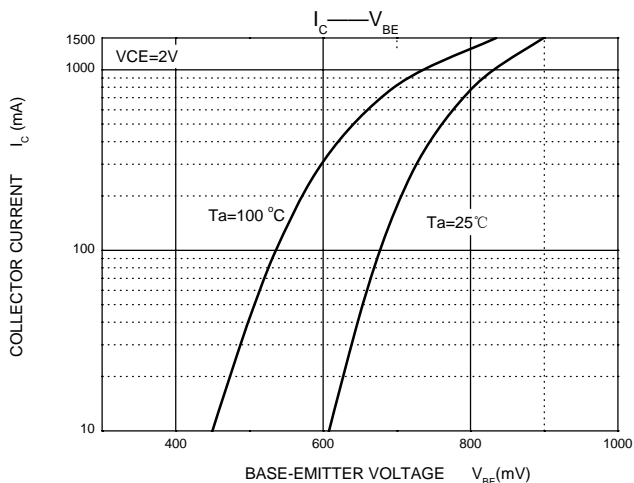
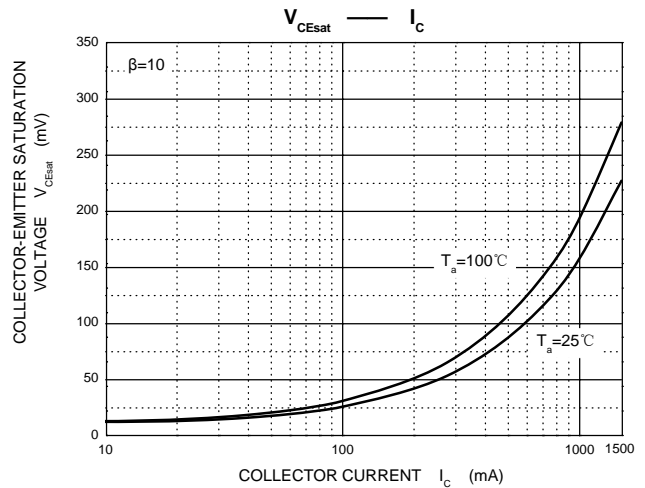
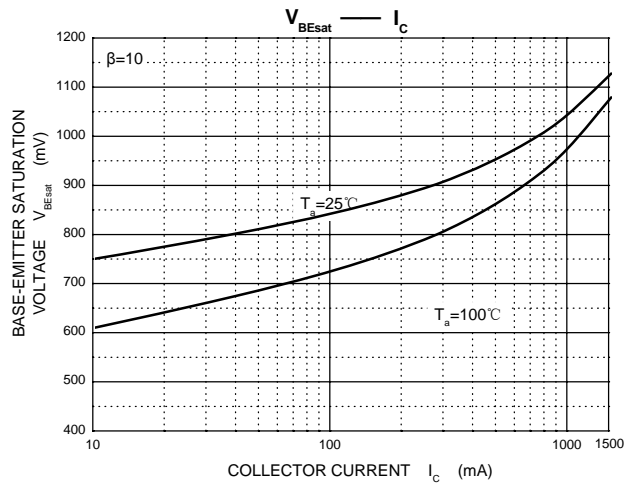
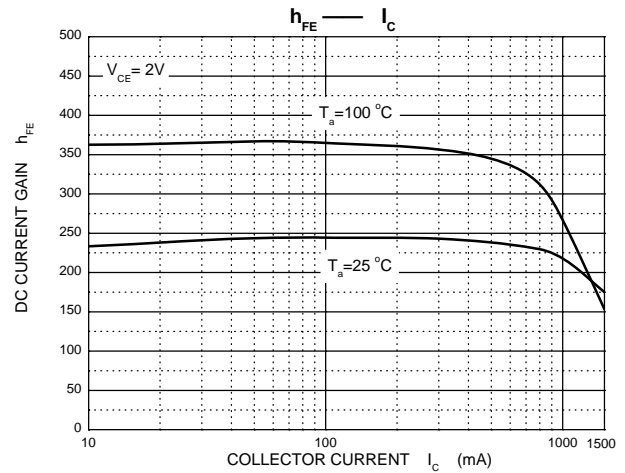
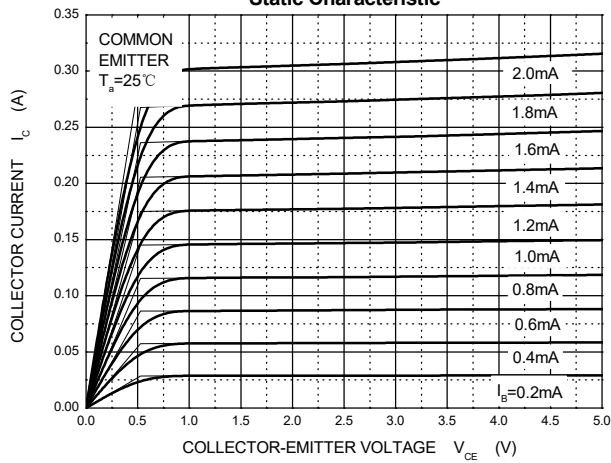
Electrical Characteristics(Ta=25°C unless otherwise specified)

Parameter	symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=0.1mA, I_E=0$	45		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=0.03A, I_B=0$	45		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=1mA, I_C=0$	6		V
Collector cut-off current	I_{CBO}	$V_{CB}=100V, I_E=0$		0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE}=100V, I_B=0$		0.5	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=6V, I_C=0$		0.1	μA
DC current gain	h_{FE1}	$V_{CE}=2V, I_C=0.15A$	100	250	
	h_{FE2}	$V_{CE}=2V, I_C=5mA$	25		
	h_{FE3}	$V_{CE}=2V, I_C=0.5A$	25		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=1.5A, I_B=0.15A$		0.5	V
Transition frequency	f_T	$V_{CE}=10V, I_C=100mA, f=1MHz$	50		MHz



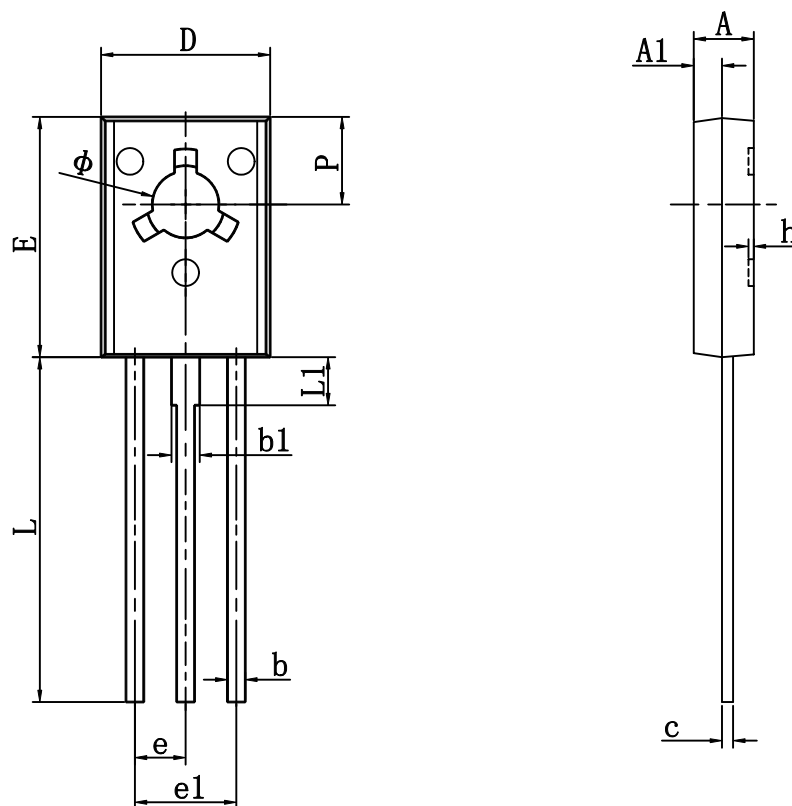
Typical Characteristics

Static Characteristic





TO-18 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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