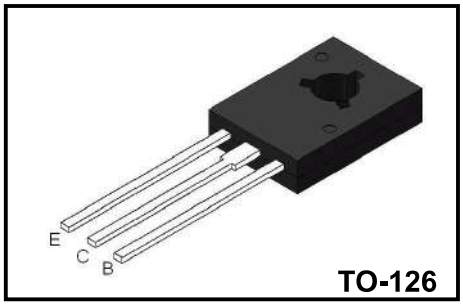
Plastic-Encapsulate Transistors(PNP）



FEATURES

- Low saturation voltage
- High Power Dissipation : P_C=1.5W(Ta=25°C)
- Complement to KTD1691

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	BV_{CBO}	-60	V
Collector-Emitter Voltage	BV_{CEO}	-60	V
Emitter-Base Voltage	BV_{EBO}	-7	V
Collector Current	I_C	-5	A
Collector Power Dissipation	P_C	1.5	W
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55～150	°C

Electrical Characteristics (Ta=25°C)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Collector-base breakdown voltage	I_C = -100μA , I_E = 0	BV_{CBO}	-60			V
Collector-emitter breakdown voltage	I_C = -10mA , I_B = 0	BV_{CEO}	-60			V
Emitter-base breakdown voltage	I_E = -100μA , I_C = 0	BV_{EBO}	-7			V
Collector cut-off current	V_{CB} = -50V , I_E = 0	I_{CBO}			-10	μA
Emitter cut-off current	V_{EB} = -7V , I_C = 0	I_{EBO}			-10	μA
DC current gain*	V_{CE}= -1V , I_C=-0.1A	$h_{FE}1$	60			
	V_{CE}= -1V , I_C=-2A	$h_{FE}2$	160		400	
	V_{CE}= -2V , I_C= -5A	$h_{FE}3$	50			
Collector-emitter saturation voltage*	I_C = -2 A , I_B = -0.2A	$V_{CE(sat)}$			-0.3	V
Base-emitter saturation voltage*	I_C = -2 A , I_B = -0.2A	$V_{BE(sar)}$			-1.2	V

*** Pulse test: Pulse Width ≤ 300μs ; Duty cycle ≤ 2%.**

h_{FE} 2 Classification

Classification	2SB1151-O	2SB1151-Y
Range	160-320	200-400

Typical Characteristics

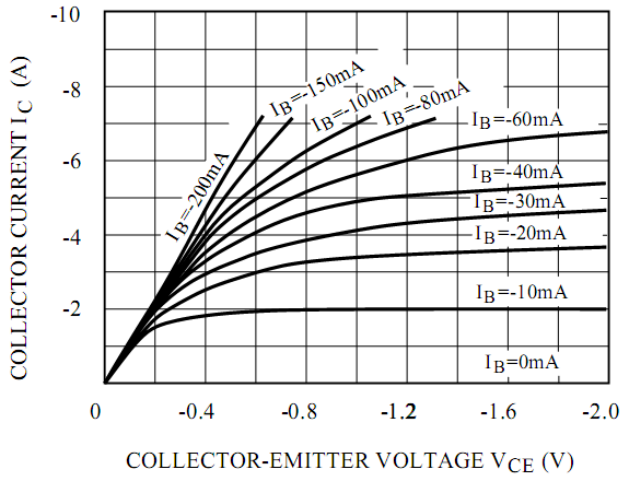


Figure 1. Static Characteristic

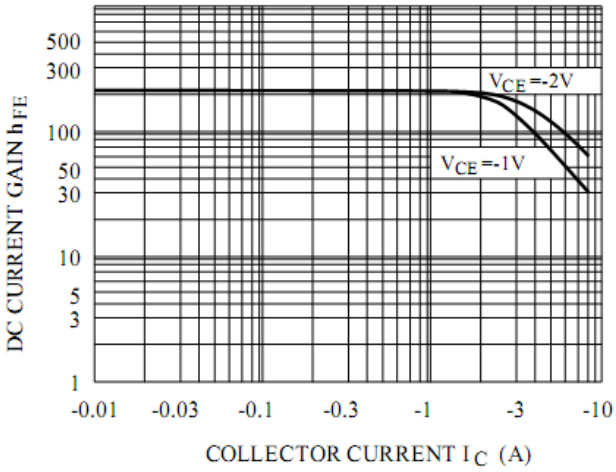


Figure 2. DC current Gain

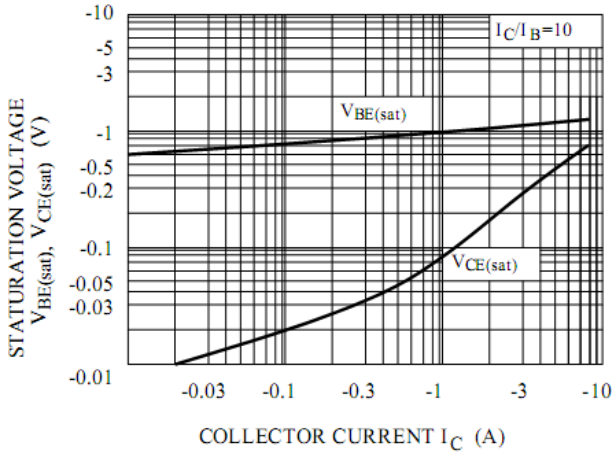


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

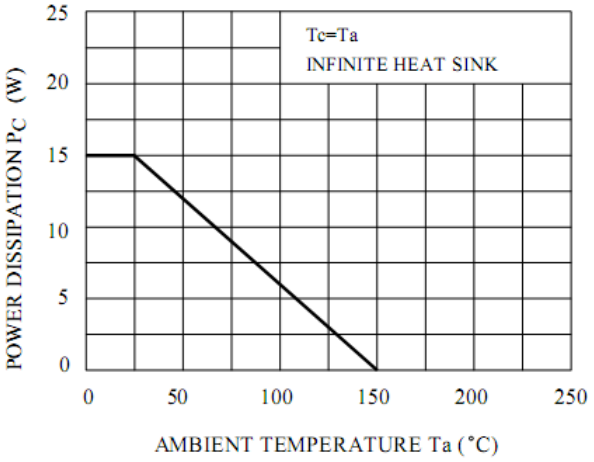


Figure 4. Power Derating

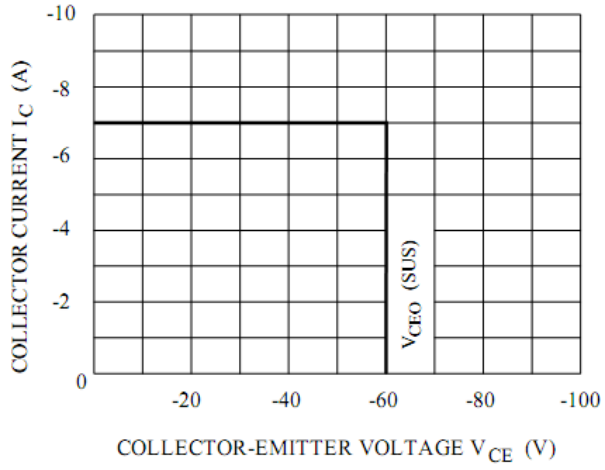


Figure 5. Reverse Bias Safe Operating Area

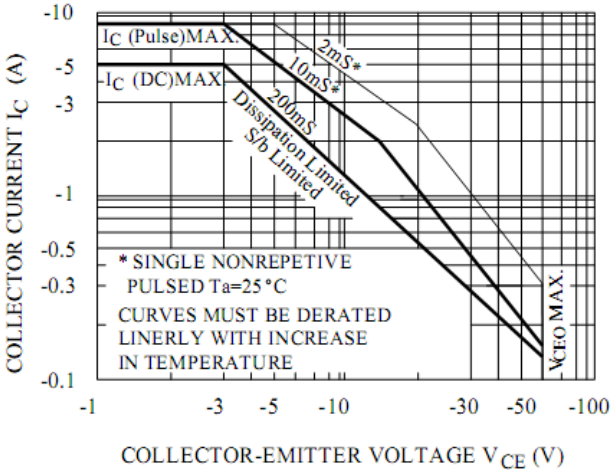


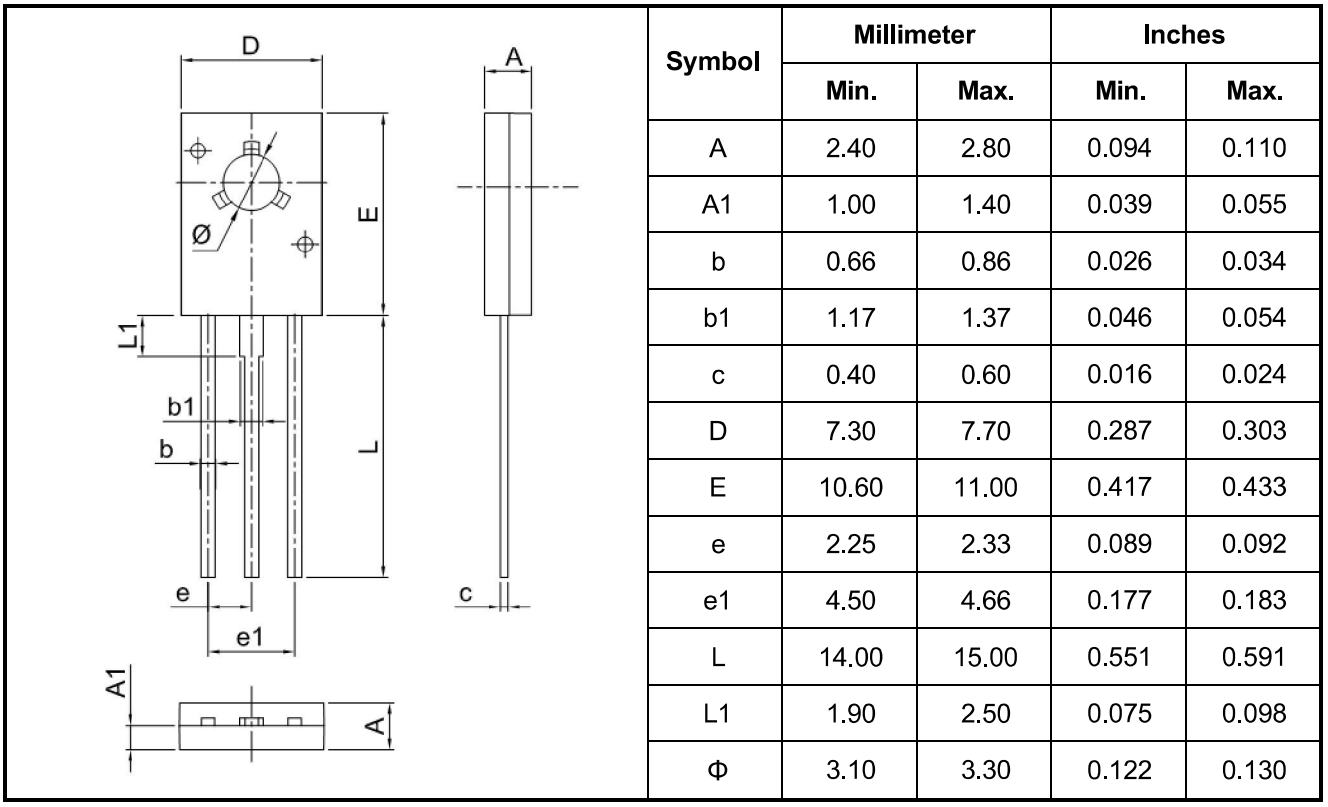
Figure 6. Safe Operating Area

Ordering information

Package	Packing Description	Base Quantity
TO-126	Bulk	500pcs/Bag

Package Dimensions

TO-126



Symbol	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	2.40	2.80	0.094	0.110
A1	1.00	1.40	0.039	0.055
b	0.66	0.86	0.026	0.034
b1	1.17	1.37	0.046	0.054
c	0.40	0.60	0.016	0.024
D	7.30	7.70	0.287	0.303
E	10.60	11.00	0.417	0.433
e	2.25	2.33	0.089	0.092
e1	4.50	4.66	0.177	0.183
L	14.00	15.00	0.551	0.591
L1	1.90	2.50	0.075	0.098
Φ	3.10	3.30	0.122	0.130

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