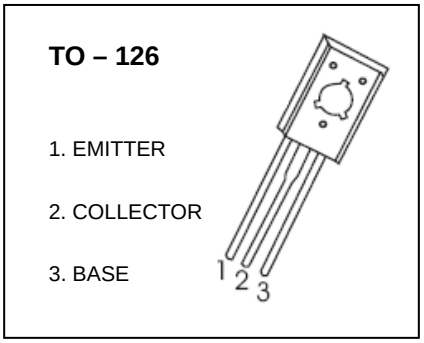
JSCJ TO-126 Plastic-Encapsulate Transistors

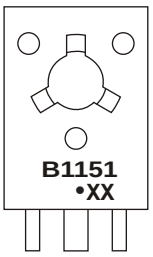
KSB1151 TRANSISTOR (PNP)



FEATURES

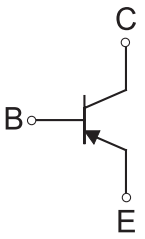
- Low Collector-Emitter Saturation Voltage
- Large Collector Current
- High Power Dissipation
- Complement to KSD1691

MARKING



B1151=Device code
Solid dot = Green molding compound device, if none, the normal device
XX=Code

Equivalent Circuit



ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
KSB1151	TO-126	Bulk	200pcs/Bag
KSB1151-TU	TO-126	Tube	60pcs/Tube

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-60	V
V_{EBO}	Emitter-Base Voltage	-7	V
I_C	Collector Current	-5	A
I_{CM}	Collector Current - Pulsed (Note 1)	-8	A
P_C	Collector Power Dissipation	1.25	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	100	℃/W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	℃

Note 1: PW≤10ms, Duty cycle ≤50%

ELECTRICAL CHARACTERISTICS

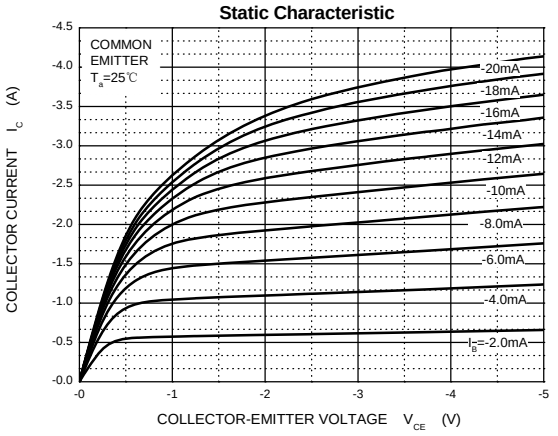
T_a=25℃ unless otherwise specified

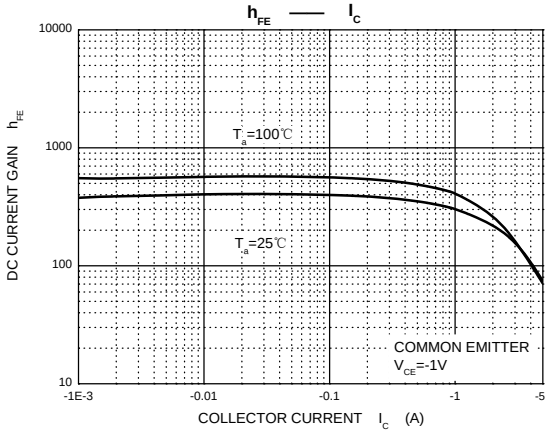
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-100μA,I_E=0	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-1mA,I_B=0	-60			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-100μA,I_C=0	-7			V
Collector cut-off current	I_{CBO}	V_{CB}=-50V,I_E=0			-10	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-7V,I_C=0			-10	μA
DC current gain	$h_{FE(1)}$	V_{CE}=-1V, I_C=-2A	100		400	
	$h_{FE(2)}$	V_{CE}=-1V, I_C=-0.1A	60			
	$h_{FE(3)}$	V_{CE}=-2V, I_C=-5A	50			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-2A,I_B=-0.2A			-0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=-2A,I_B=-0.2A			-1.2	V
Transition frequency	f_T	V_{CE}=-10V, I_C=-500mA	30			MHz

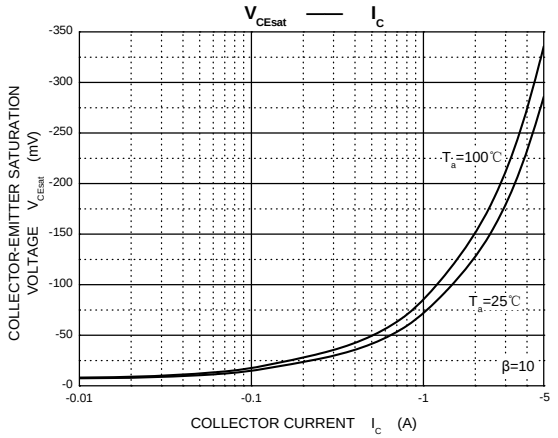
CLASSIFICATION OF $h_{FE(1)}$

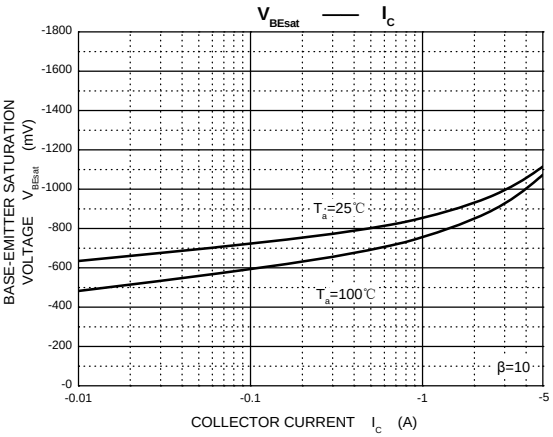
RANK	O	Y	G
RANGE	100-200	160-320	200-400

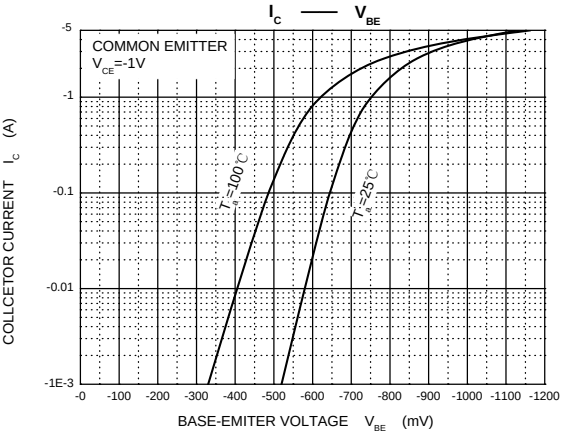
Typical Characteristics

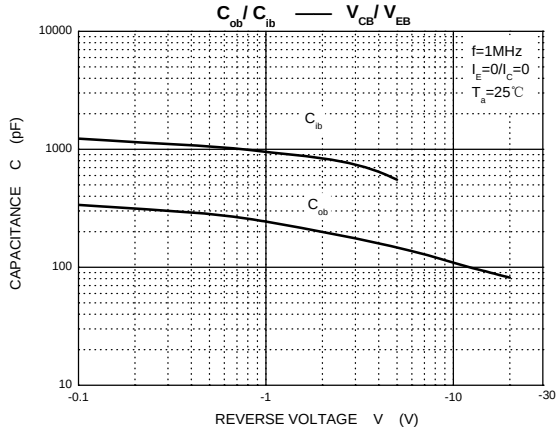


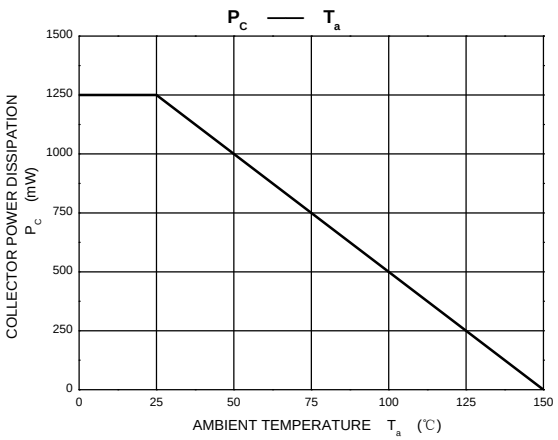




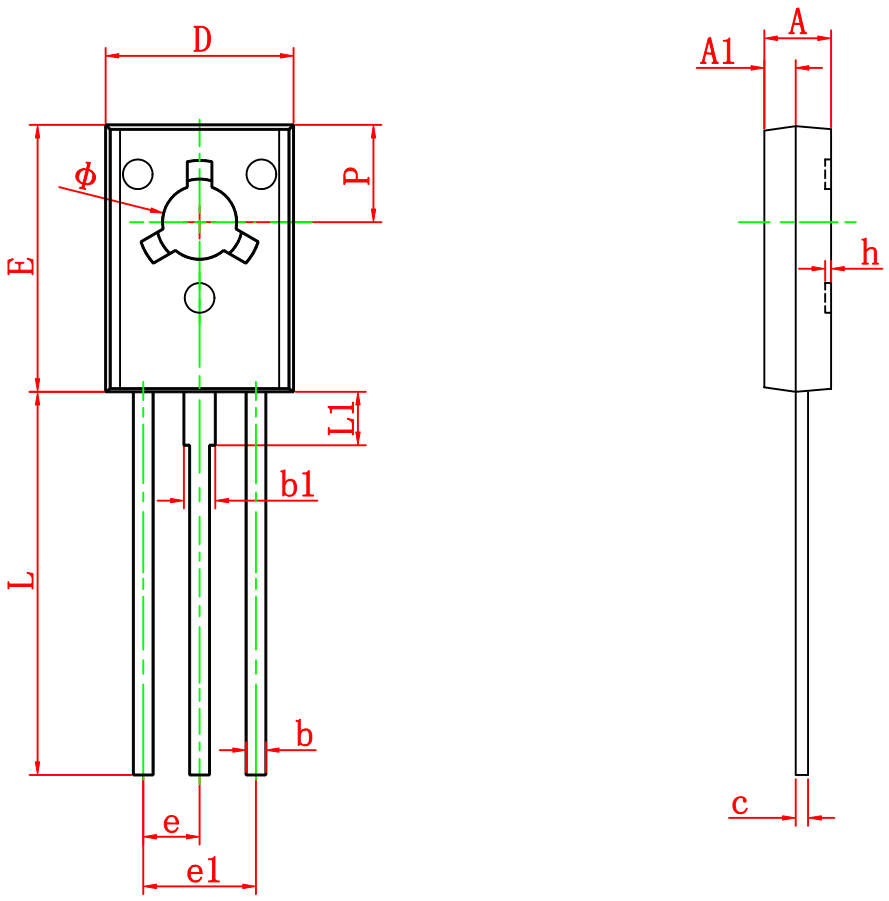








TO-126 Package Outline Dimensions



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