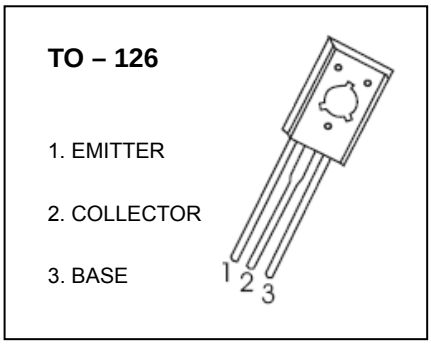
TO-126 Plastic-Encapsulate Transistors

KSD1692 TRANSISTOR (NPN)



FEATURES

- High DC Current Gain
- Low Collector Saturation Voltage
- High Power Dissipation

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	150	V
V_{CEO}	Collector-Emitter Voltage	100	V
V_{EBO}	Emitter-Base Voltage	8	V
I_C	Collector Current	3	A
P_C	Collector Power Dissipation	1.25	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	100	℃/W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~+150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

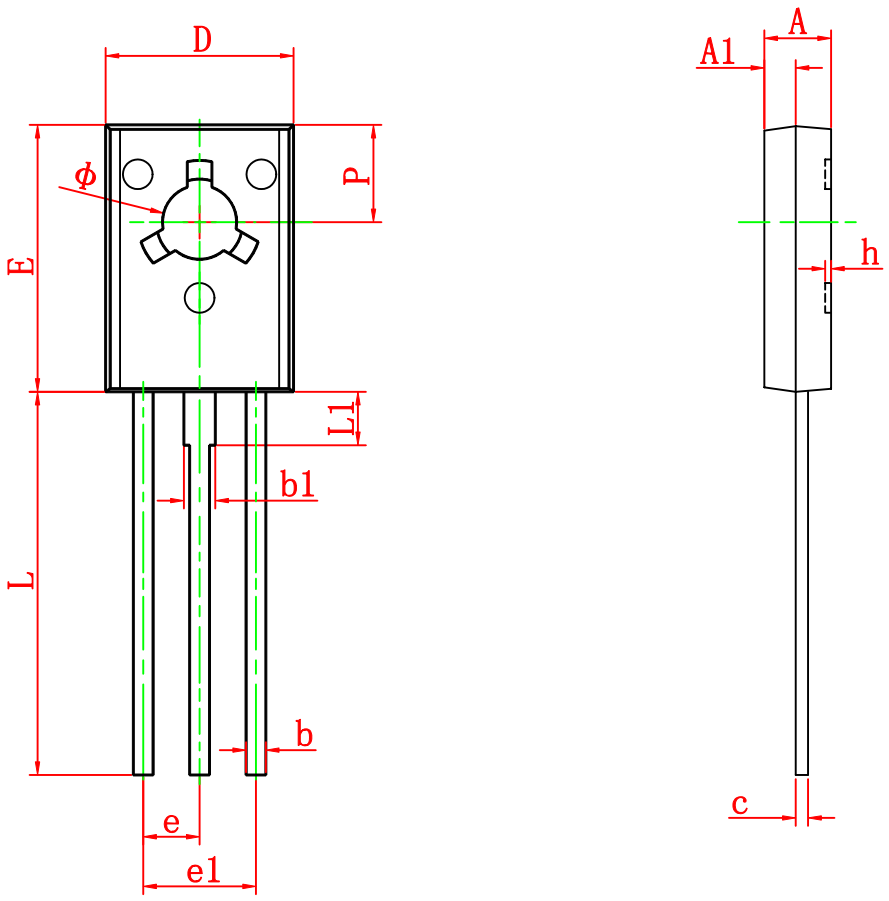
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=1mA,I_E=0	150			V
Collector-emitter breakdown voltage	$V_{CEO(SUS)}$*	I_C=30mA,I_B=0	100			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=5mA,I_C=0	8			V
Collector cut-off current	I_{CBO}	V_{CB}=100V,I_E=0			10	μA
Emitter cut-off current	I_{EBO}	V_{EB}=5V,I_C=0			2	mA
DC current gain	$h_{FE(1)}$*	V_{CE}=2V, I_C=1.5A	2K		20K	
	$h_{FE(2)}$*	V_{CE}=2V, I_C=3A	1K			
Collector-emitter saturation voltage	$V_{CE(sat)}$*	I_C=1.5A,I_B=1.5mA			1.2	V
Base-emitter saturation voltage	$V_{BE(sat)}$*	I_C=1.5A,I_B=1.5mA			2	V

*Pulse test: pulse width ≤300μs, duty cycle≤ 1.5%.

CLASSIFICATION OF $h_{FE(1)}$

RANK	O	Y	G
RANGE	2K-5K	4K-12K	6K-20K

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