

TO-126 Plastic-Encapsulate Transistors

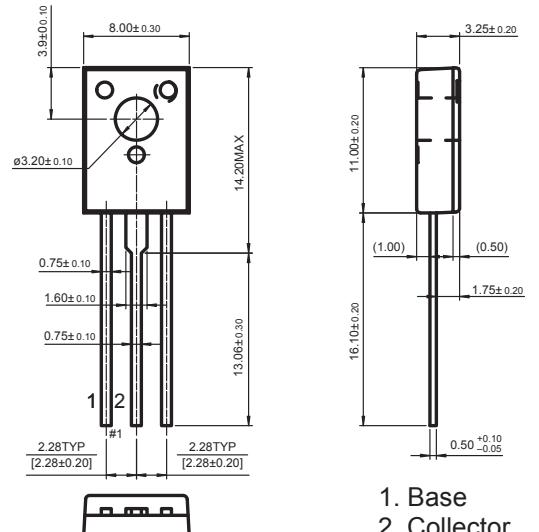
FEATURES

- High DC Current Gain
- Low Collector Saturation Voltage
- High Power Dissipation
- TRANSISTOR (NPN)

MECHANICAL DATA

- Case style: TO-126 molded plastic
- Mounting position: any

TO-126



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (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_{JJA}	Thermal Resistance From Junction To Ambient	100	°C/W
T_j	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55~+150	°C

ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
KSD1692	TO-126	Bulk	200pcs/Bag
KSD1692-TU	TO-126	Tube	60pcs/Tube

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