

isc Silicon NPN Power Transistor
MJE1320
DESCRIPTION

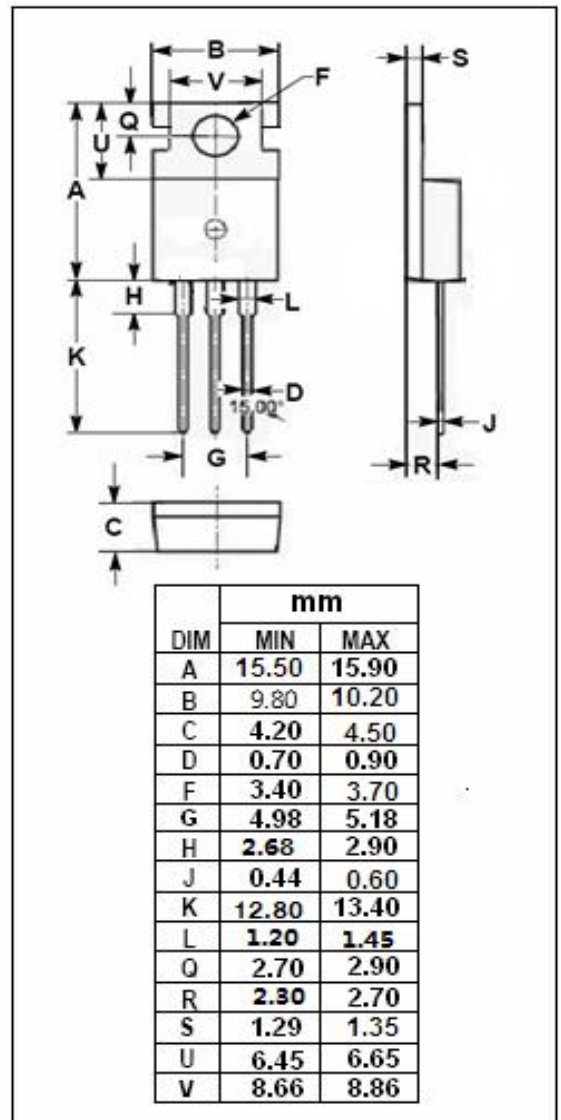
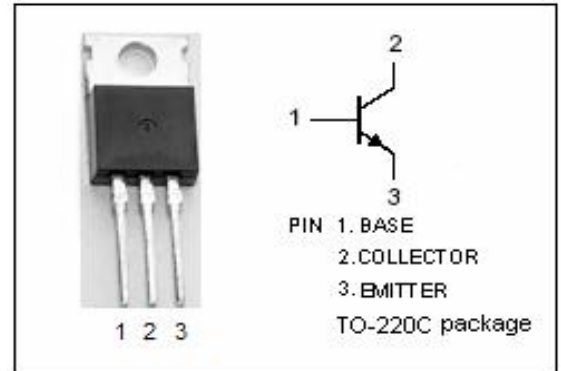
- With TO-220 packaging
- Fast switching speed
- Reliable performance at higher powers
- Accurate reproduction of Input signal
- Greater dynamic range
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching regulators
- High frequency inverters
- General purpose power amplifiers

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CB0}	Collector-Base Voltage	1500	V
V_{CE0}	Collector-Emitter Voltage	800	V
V_{EB0}	Emitter-Base Voltage	9	V
I_C	Collector Current-Continuous	2	A
I_B	Base Current-Continuous	1.5	A
P_D	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	80	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-65~150	$^\circ\text{C}$



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ELECTRICAL CHARACTERISTICS

T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
BV _{CBO}	Collector-Base Breakdown Voltage	I _C =0.1mA; I _E =0	1500			V
BV _{CEO}	Collector-Emitter Breakdown Voltage	I _C =50mA; R _{BE} =∞	800			V
BV _{EBO}	Emitter-Base Breakdown Voltage	I _E =0.1mA; I _C =0	9			V
V _{CE(sat)-1}	Collector-Emitter Saturation Voltage	I _C =1A; I _B =0.5A			1.0	V
V _{CE(sat)-2}	Collector-Emitter Saturation Voltage	I _C =2A; I _B =1A			2.5	V
V _{BE(sat)-1}	Base-Emitter Saturation Voltage	I _C =1A; I _B =0.5A			1.5	V
V _{BE(sat)-2}	Base-Emitter Saturation Voltage	I _C =2A; I _B =1A			2.8	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 1500V; I _E = 0			0.25	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 9V; I _C =0			0.25	mA
h _{FE-1}	DC Current Gain	I _C = 2A ; V _{CE} = 5V	2.5			
h _{FE-2}	DC Current Gain	I _C = 1A ; V _{CE} = 5V	3			

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