

isc Silicon NPN Power Transistor

MJ13334

DESCRIPTION

- Low Collector-Emitter Saturation Voltage
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

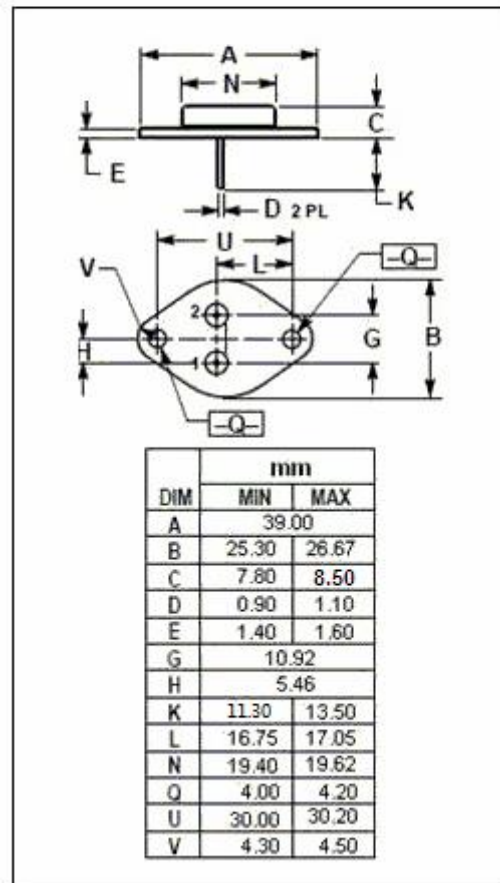
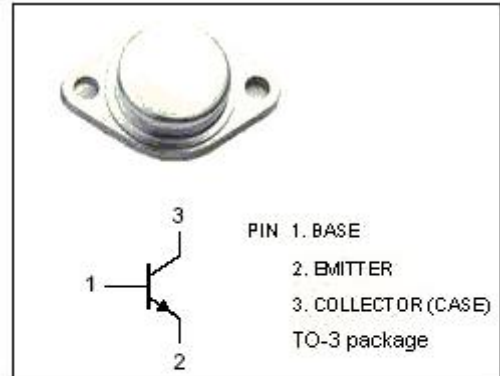
- Designed for general purpose amplifiers ,low frequency switching and motor control applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	750	V
V_{CEO}	Collector-Emitter Voltage	450	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	20	A
I_{CM}	Collector Current-Peak	30	A
I_B	Base Current- Continuous	10	A
P_C	Collector Power Dissipation @ $T_c=25^{\circ}\text{C}$	175	W
T_j	Junction Temperature	200	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-65~200	$^{\circ}\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.0	$^{\circ}\text{C/W}$



isc Silicon NPN Power Transistor**MJ13334****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 50mA, I _B = 0	450			V
V _{CE(sat)-1}	Collector-Emitter Saturation Voltage	I _C = 10A ,I _B = 2A			1.8	V
V _{CE(sat)-2}	Collector-Emitter Saturation Voltage	I _C = 20A ,I _B = 6.7A			5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 10A ,I _B = 2A			1.8	V
I _{CEO}	Collector Cutoff Current	V _{CE} = 450V, I _B =0			1	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 6V; I _C =0			1	mA
h _{FE}	DC Current Gain	I _C = 5A ; V _{CE} = 5V	10		60	

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