

isc Silicon NPN Power Transistor

MJH16008

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 450V(\text{Min})$
- High Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

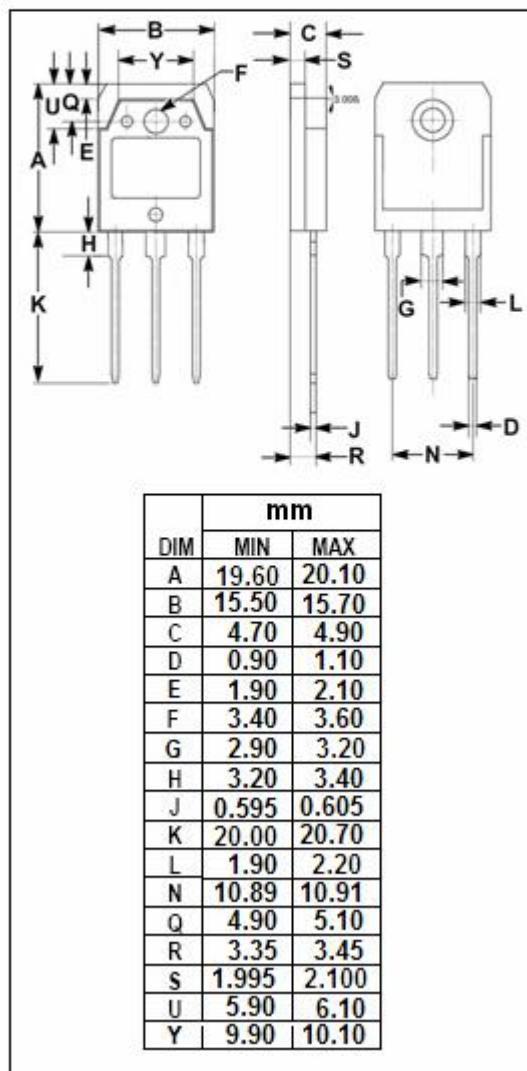
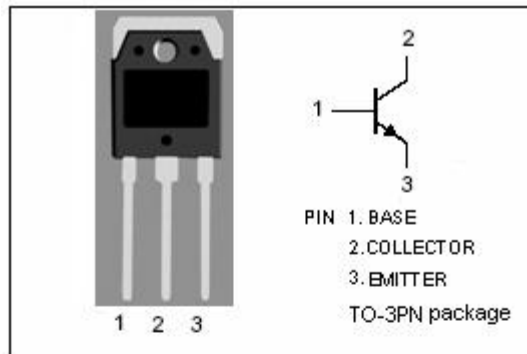
- Designed for high-voltage ,high-speed, power switching in inductive circuits where fall time is critical. They are particularly suited for line operated switch-mode applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CEV}	Collector-Emitter Voltage	850	V
$V_{CEO(SUS)}$	Collector-Emitter Voltage	450	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	8	A
I_{CM}	Collector Current-Peak	16	A
I_B	Base Current-Continuous	6	A
I_{BM}	Base Current-Peak	12	A
P_C	Collector Power Dissipation @ $T_c=25^{\circ}\text{C}$	125	W
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-65~150	$^{\circ}\text{C}$

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**MJH16008****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 =3mA ; I _B =0	450			V
V _{CE(sat)-1}	Collector-Emitter Saturation Voltage	I _C = 3A; I _B = 0.3A			2.5	V
V _{CE(sat)-2}	Collector-Emitter Saturation Voltage	I _C = 5A; I _B = 0.5A I _C = 5A; I _B = 0.5A, T _C =100°C			3.0 3.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 5A; I _B = 0.5A I _C = 5A; I _B = 0.5A, T _C =100°C			1.5 1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} =50V; I _E =0 T _C =100°C			0.25 1.5	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 6V; I _C =0			1.0	mA
h _{FE}	DC Current Gain	I _C = 8A ; V _{CE} = 5V	7			

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