

isc Silicon PNP Power Transistor
MJE5852
DESCRIPTION

- Collector-Emitter Breakdown Voltage
: $V_{CEO} = -400V(\text{Min})$
- Low Collector-Emitter Saturation Voltage
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

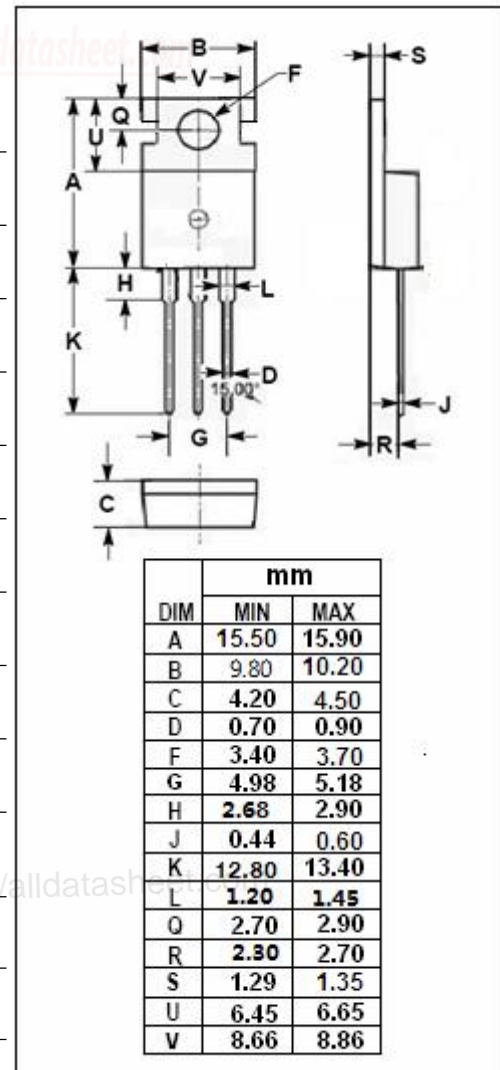
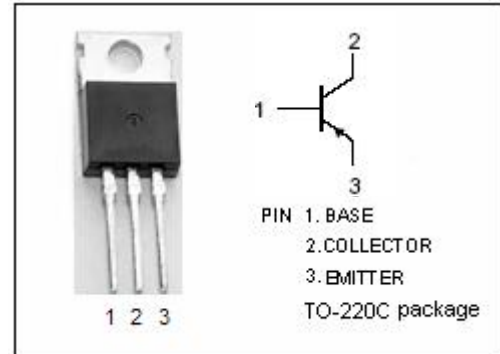
- Switching Regulators
- Inverters
- Solenoid and relay drivers
- Motor control

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CEV}	Collector-Base Voltage	-450	V
$V_{CEO(\text{SUS})}$	Collector-Emitter Voltage	-400	V
V_{EBO}	Emitter-Base Voltage	-6.0	V
I_c	Collector Current-Continuous	-8.0	A
I_B	Base Current- Continuous	-4.0	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	80	W
T_j	Junction Temperature	-65~150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-65~150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{\text{th j-c}}$	Thermal Resistance, Junction to Case	1.25	$^\circ\text{C/W}$



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ELECTRICAL CHARACTERISTICS

T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Breakdown Voltage	I _C = -10mA, I _B = 0	-400		V
I _{CEV}	Collector Cutoff Current	V _{CEV} = -450V, T _C =25°C T _C =100°C		-0.5 -2.5	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = -6V; I _C = 0		-1.0	mA
h _{FE}	DC Current Gain	I _C = -2A; V _{CE} = -5V I _C = -5A; V _{CE} = -5V	15 5		
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -4A; I _B = -1A		-2.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = -4A; I _B = -1A		-1.5	V

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