

## isc Silicon PNP Power Transistor

## MJE4353

## DESCRIPTION

- Collector-Emitter Sustaining Voltage-  
:  $V_{CEO(SUS)} = -160V(\text{Min})$
- DC current gain -  
:  $h_{FE} = 15 (\text{Min}) @ I_C = -8 A$   
:  $h_{FE} = 8 (\text{Min}) @ I_C = -16A$
- Complement to Type MJE4343
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## APPLICATIONS

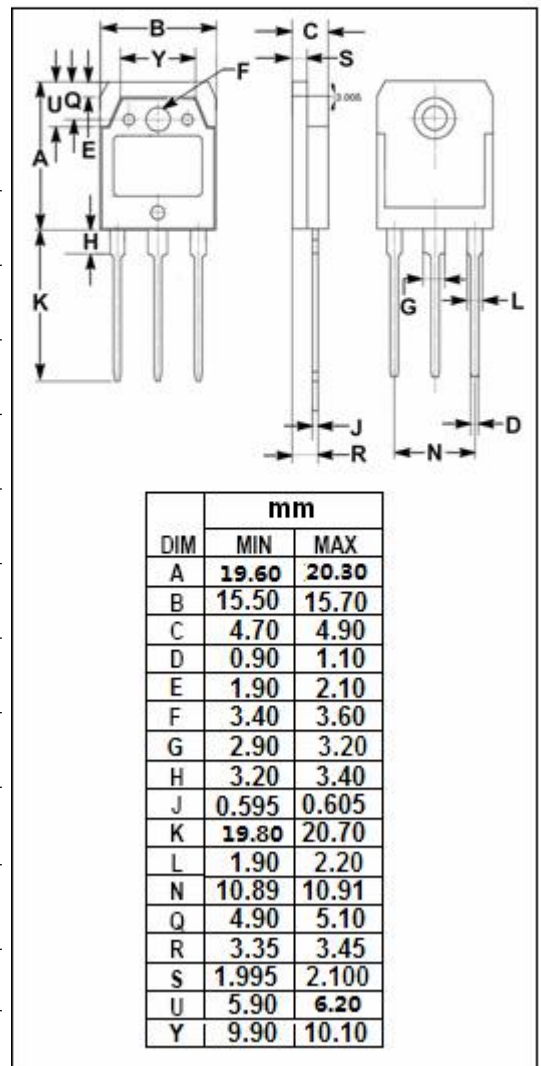
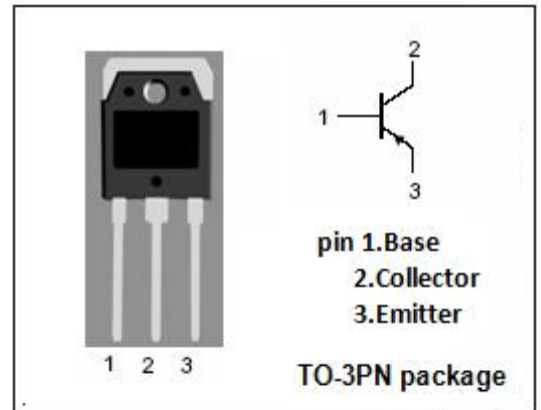
- For use in high power audio amplifier and switching regulator circuits

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-160	V
$V_{CEO}$	Collector-Emitter Voltage	-160	V
$V_{EBO}$	Emitter-Base Voltage	-7	V
$I_C$	Collector Current -Continuous	-16	A
$I_B$	Base Current	-5	A
$P_C$	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	125	W
$T_j$	Junction Temperature	-65~150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-65~150	$^\circ\text{C}$

## THERMAL CHARACTERISTICS

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



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## ELECTRICAL CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V <sub>CEQ(SUS)</sub>	Collector-Emitter Sustaining Voltage	I <sub>C</sub> = -100mA ; I <sub>B</sub> = 0	-160		V
V <sub>CE(sat)</sub> -1	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -8A ; I <sub>B</sub> = -0.8A		-2.0	V
V <sub>CE(sat)</sub> -2	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -16A ; I <sub>B</sub> = -2A		-3.5	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = -16A ; I <sub>B</sub> = -2A		-3.9	V
V <sub>BE(on)</sub>	Base-Emitter On Voltage	I <sub>C</sub> = -16A ; V <sub>CE</sub> = -4V		-3.9	V
I <sub>CBO</sub>	Collector-Base Cutoff Current	V <sub>CB</sub> = -160V ; I <sub>E</sub> = 0		-750	μ A
I <sub>CEO</sub>	Collector-Emitter Cutoff Current	V <sub>CB</sub> = -80V ; I <sub>E</sub> = 0		-750	μ A
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -7V ; I <sub>C</sub> = 0		-1	mA
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = -8A ; V <sub>CE</sub> = -2V	15		
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = -16A ; V <sub>CE</sub> = -4V	8		

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