

# isc Silicon PNP Power Transistor

MJ15027

## DESCRIPTION

- High current capability
- High power dissipation
- Complement to the NPN MJ15026
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## APPLICATIONS

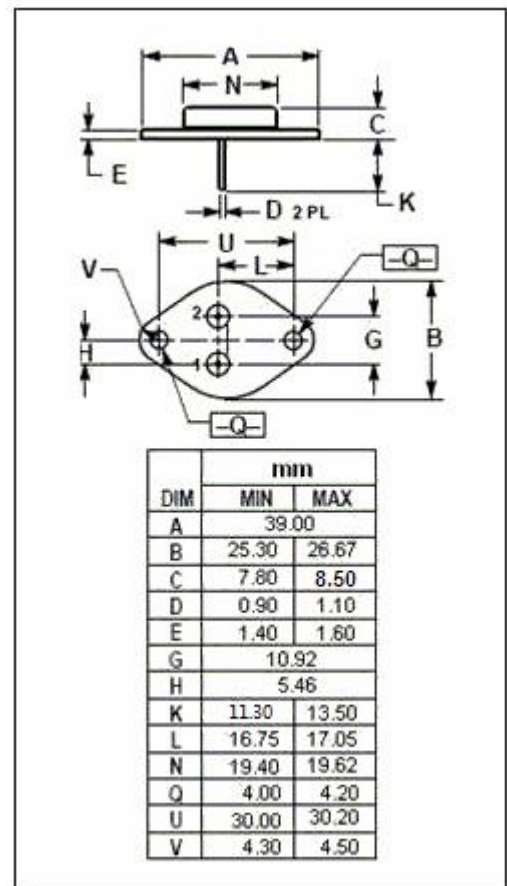
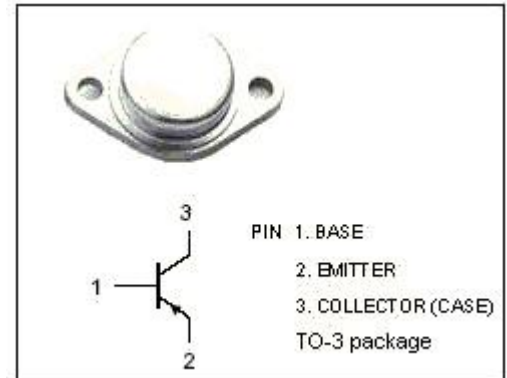
- Audio power amplifier
- DC to DC converter

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-200	V
$V_{CEO}$	Collector-Emitter Voltage	-200	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current-Continuous	-16	A
$P_D$	Total Power Dissipation@ $T_c=25^{\circ}\text{C}$	250	W
$T_j$	Junction Temperature	150	$^{\circ}\text{C}$
$T_{stg}$	Storage Temperature	-50~150	$^{\circ}\text{C}$

## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	0.608	$^{\circ}\text{C/W}$



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## ELECTRICAL CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V <sub>CEO(SUS)</sub>	Collector-Emitter Sustaining Voltage	I <sub>C</sub> = -10mA ; I <sub>B</sub> = 0	-200		V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -10A; I <sub>B</sub> = -1A		-2	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = -100V; I <sub>E</sub> =0		-0.1	mA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -5V; I <sub>C</sub> = 0		-0.1	mA
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = -5A ; V <sub>CE</sub> = -5V	25		
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = -1A ; V <sub>CE</sub> = -5V	50	150	

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