

# isc Silicon NPN Power Transistor

2N4396

## DESCRIPTION

- Excellent Safe Operating Area
- Low Collector-Emitter Saturation Voltage
- The device employs the popular JEDEC TO-3
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation.

## APPLICATIONS

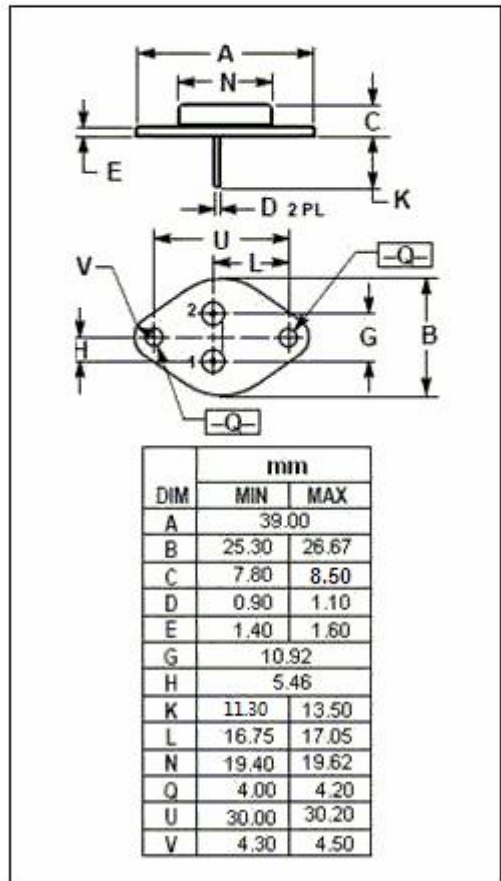
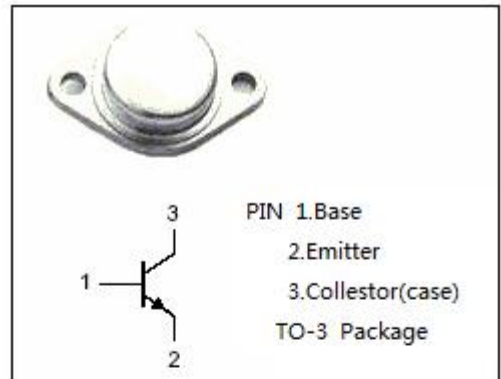
- High voltage high current power transistors

## ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CB0</sub>	Collector-Base Voltage	80	V
V <sub>CEO</sub>	Collector-Emitter Voltage	60	V
V <sub>EBO</sub>	Emitter-Base Voltage	4	V
I <sub>c</sub>	Collector Current-Continuous	5	A
P <sub>c</sub>	Collector Power Dissipation@T <sub>c</sub> =25°C	62	W
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-65~150	°C

## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	2	°C/W



**isc Silicon NPN Power Transistor****2N4396****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEO(SUS)}^*$	Collector-Emitter Sustaining Voltage	$I_C=30\text{mA}; I_B=0$	60		V
$I_{CEO}$	Collector Cutoff Current	$V_{CE}=60\text{V}; I_B=0$		1	mA
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}=4\text{V}; I_C=0$		0.1	mA
$h_{FE}$	DC Current Gain	$I_C=2\text{A}; V_{CE}=1\text{V}$	40	170	

\*:Pulse test:Pulse width=300us,duty cycle≤2%

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