

**isc Silicon NPN Power Transistor****2SC2246****DESCRIPTION**

- High Collector-Emitter Sustaining Voltage-  
:  $V_{CEO(SUS)} = 400V$  (Min)
- High Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

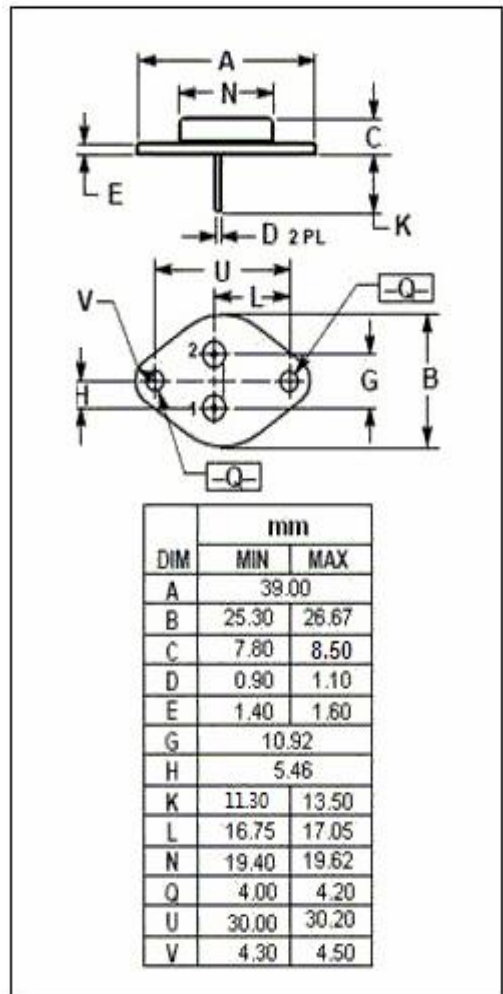
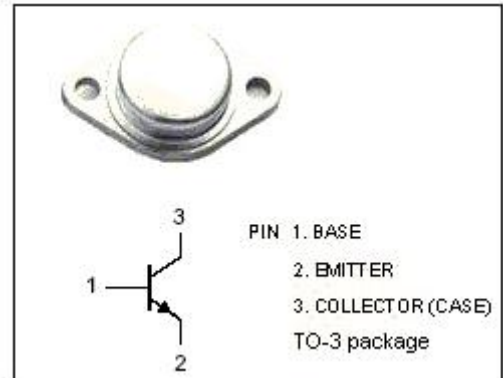
- Power switching
- Power amplification
- Power driver

**ABSOLUTE MAXIMUM RATINGS( $T_a=25^\circ C$ )**

SYMBOL	PARAMETER	MAX	UNIT
$V_{CBO}$	Collector-Base Voltage	450	V
$V_{CEO}$	Collector-Emitter Voltage	400	V
$V_{EBO}$	Emitter-Base Voltage	7	V
$I_C$	Collector Current-Continuous	15	A
$I_B$	Base Current-Continuous	4	A
$P_C$	Collector Power Dissipation @ $T_c=25^\circ C$	100	W
$T_j$	Junction Temperature	200	$^\circ C$
$T_{stg}$	Storage Temperature Range	-65~200	$^\circ C$

**THERMAL CHARACTERISTICS**

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



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## ELECTRICAL CHARACTERISTICS

 $T_C=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEQ(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C=10\text{mA}$ ;	400			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=6\text{A}$ ; $I_B=1.2\text{A}$			1.2	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=6\text{A}$ ; $I_B=1.2\text{A}$			1.5	V
$h_{FE}$	DC Current Gain	$I_C=6\text{A}$ ; $V_{CE}=5\text{V}$	10			
$I_{CBO}$	Collector Cutoff Current	$V_{CB}=450\text{V}$ ; $I_E=0$			1.0	mA
$I_{CEO}$	Collector Cutoff Current	$V_{CE}=400\text{V}$ ; $I_B=0$			5.0	mA
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}=7\text{V}$ ; $I_C=0$			0.1	mA

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