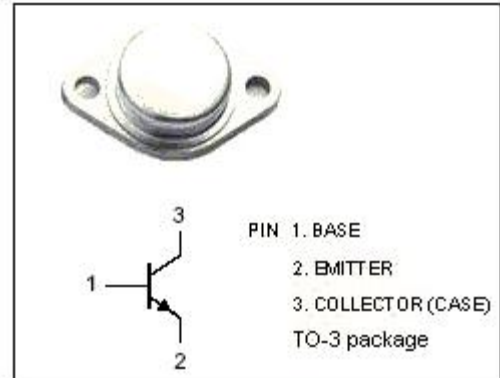


**isc Silicon NPN Power Transistor**
**2SC2244**
**DESCRIPTION**

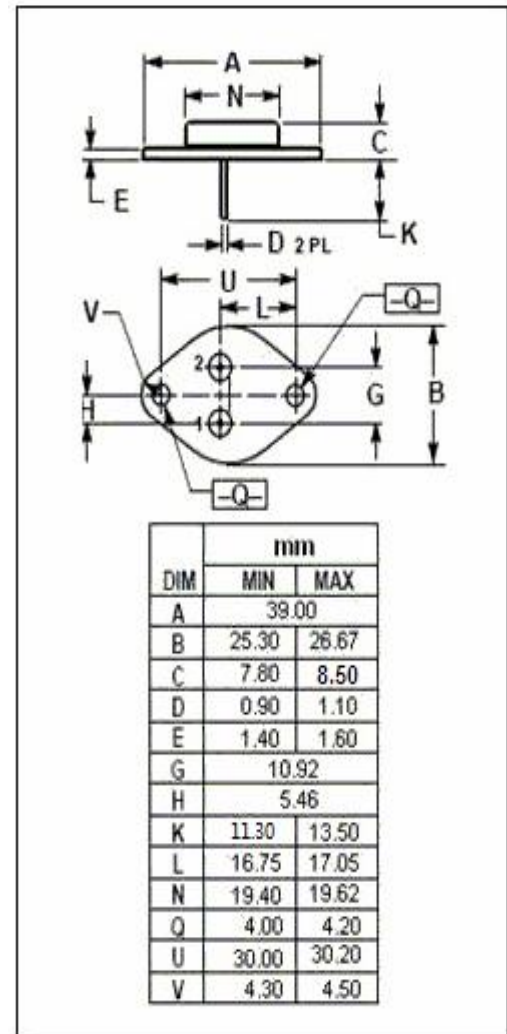
- High Collector-Emitter Sustaining Voltage-  
:  $V_{CEO(SUS)} = 400V$  (Min)
- High Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**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	5	V
$I_C$	Collector Current-Continuous	8	A
$I_{CM}$	Collector Current-Peak	16	A
$I_B$	Base Current-Continuous	3	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	1.0	$^{\circ}C/W$

## ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C=50\text{mA}$ ; $L=25\text{mH}$	400			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=3\text{A}$ ; $I_B=0.6\text{A}$			1.2	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=3\text{A}$ ; $I_B=0.6\text{A}$			1.5	V
$h_{FE}$	DC Current Gain	$I_C=3\text{A}$ ; $V_{CE}=5\text{V}$	10			
$I_{CBO}$	Collector Cutoff Current	$V_{CB}=450\text{V}$ ; $I_E=0$ $T_C=125^\circ\text{C}$			1.0 4.0	mA
$I_{CEO}$	Collector Cutoff Current	$V_{CE}=400\text{V}$ ; $I_B=0$			5.0	mA
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}=5\text{V}$ ; $I_C=0$			1.0	mA

## Switching Times

$t_r$	Rise Time	$I_C=3\text{A}$ ; $I_{B1}=I_{B2}=0.6\text{A}$			1.0	$\mu\text{s}$
$t_{stg}$	Storage Time				2.0	$\mu\text{s}$
$t_f$	Fall Time				1.0	$\mu\text{s}$

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