

isc Silicon NPN Power Transistor

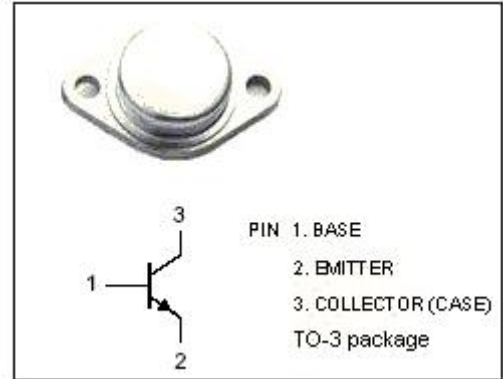
2SC2246

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

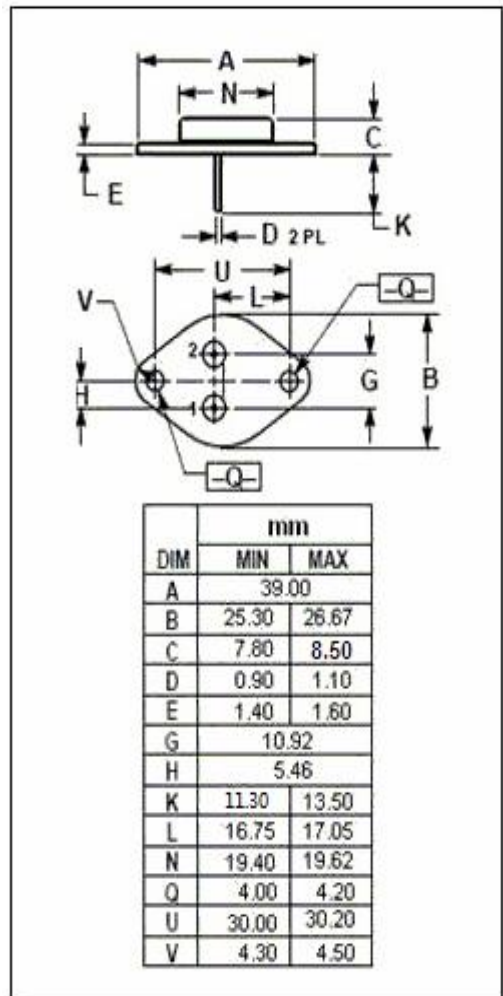
APPLICATIONS

- 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
$V_{CE(SUS)}$	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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