

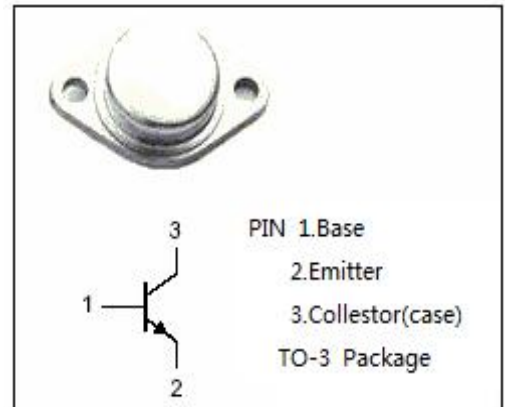
isc Silicon NPN Power Transistors
BD550B
DESCRIPTION

High Power Dissipation

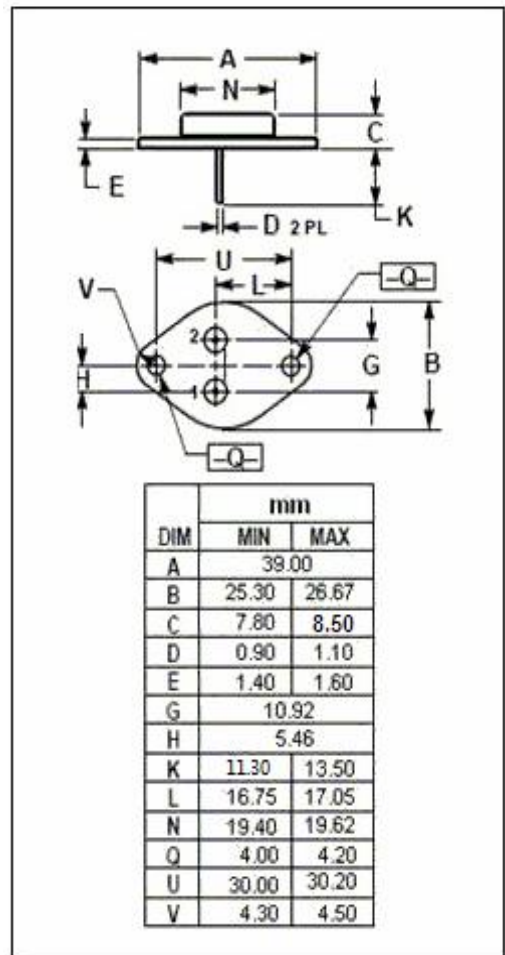
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 250V(\text{Min})$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for use as either driver or output unit applications in audio amplifier circuits.


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

SYMBOL	PARAMETER	MAX	UNIT
V_{CBO}	Collector-Base Voltage	275	V
V_{CER}	Collector-Emitter Voltage $R_{BE} = 100\ \Omega$	275	V
V_{CEO}	Collector-Emitter Voltage	250	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	7	A
I_B	Base Current-Continuous	2	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	150	W
T_j	Junction Temperature	200	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-65~200	$^\circ\text{C}$



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ELECTRICAL CHARACTERISTICS

T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 50mA ; I _B = 0	250			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 2A ; I _B = 0.25A			2	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = 2A ; V _{CE} = 4V			2	V
I _{CER}	Collector Cutoff Current	V _{CE} = 250V ; R _{BE} = 100 Ω			1	mA
I _{CEO}	Collector Cutoff Current	V _{CE} = 200V ; I _B = 0			5	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V ; I _C = 0			1	mA
h _{FE}	DC Current Gain	I _C = 2A ; V _{CE} = 4V	10		50	
f _T	Current Gain-Bandwidth Product	I _C = 0.2A ; V _{CE} = 10V		5		MHz

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