

isc Silicon NPN Power Transistors

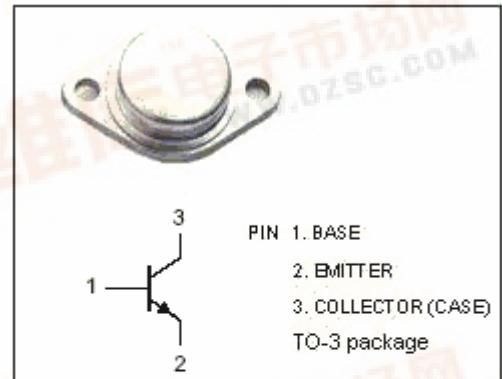
BD550

DESCRIPTION

- High Power Dissipation
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 110V(\text{Min})$

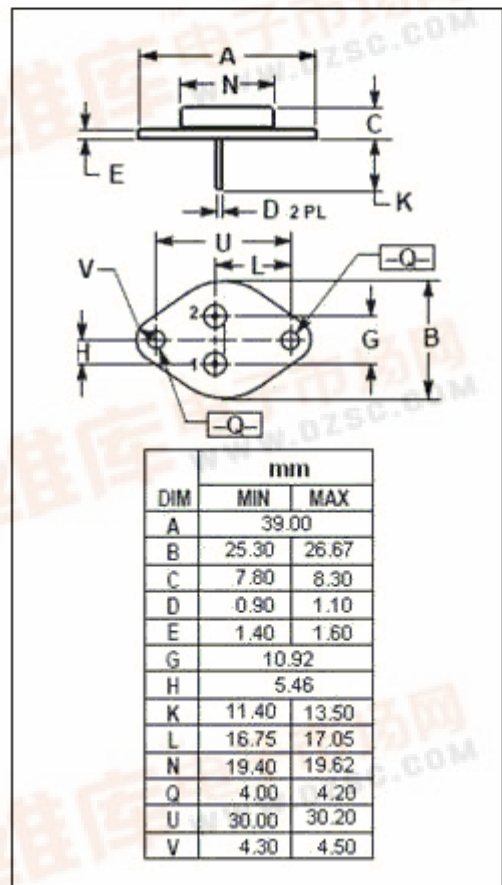
APPLICATIONS

- 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	130	V
V_{CER}	Collector-Emitter Voltage $R_{BE} = 100 \Omega$	130	V
V_{CEO}	Collector-Emitter Voltage	110	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

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C=0.2\text{A}; I_B=0$	110			V
$V_{CER(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C=0.2\text{A}; R_{BE}=100\ \Omega$	130			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=4\text{A}; I_B=0.5\text{A}$			2	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C=4\text{A}; V_{CE}=4\text{V}$			1.75	V
I_{CER}	Collector Cutoff Current	$V_{CE}=110\text{V}; R_{BE}=100\ \Omega$			1	mA
I_{CEO}	Collector Cutoff Current	$V_{CE}=95\text{V}; I_B=0$			5	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=5\text{V}; I_C=0$			1	mA
h_{FE}	DC Current Gain	$I_C=4\text{A}; V_{CE}=4\text{V}$	15		75	
f_T	Current Gain-Bandwidth Product	$I_C=0.2\text{A}; V_{CE}=10\text{V}$		5		MHz