

ISC Silicon NPN Power Transistor

2SD557

DESCRIPTION

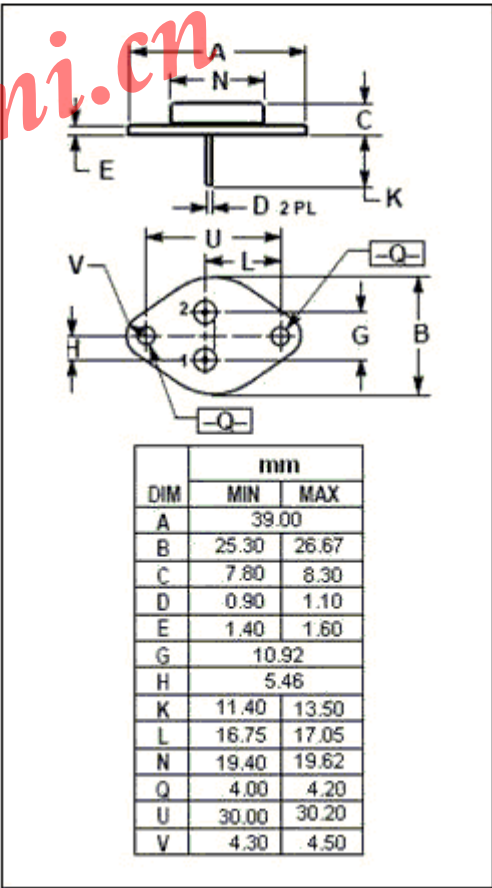
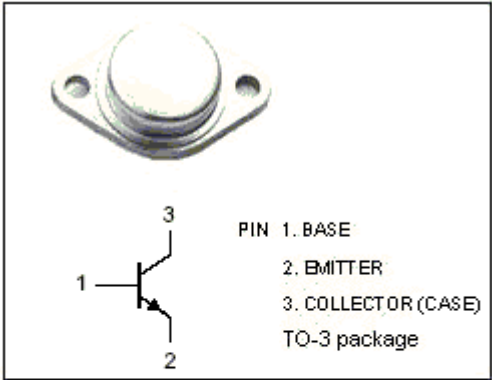
- High Current Capability
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 140V(\text{Min.})$
- High Collector Power Dissipation

APPLICATIONS

- Designed for high power audio amplifier applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	140	V
V_{CEO}	Collector-Emitter Voltage	140	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	15	A
I_{CM}	Collector Current-Peak	20	A
P_C	Collector Power Dissipation @ $T_c=25^{\circ}C$	120	W
T_j	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature	-55~150	$^{\circ}C$



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ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C=0.2\text{A}; I_B=0$	140			V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	$I_C=10\text{A}; I_B=1\text{A}$			1.0	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	$I_C=16\text{A}; I_B=4\text{A}$			2.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C=8\text{A}; V_{CE}=2\text{V}$			1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=140\text{V}; I_E=0$			2.0	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=7\text{V}; I_C=0$			5.0	mA
h_{FE}	DC Current Gain	$I_C=5\text{A}; V_{CE}=4\text{V}$	30			