

**isc Silicon NPN Power Transistor**
**2SD557**
**DESCRIPTION**

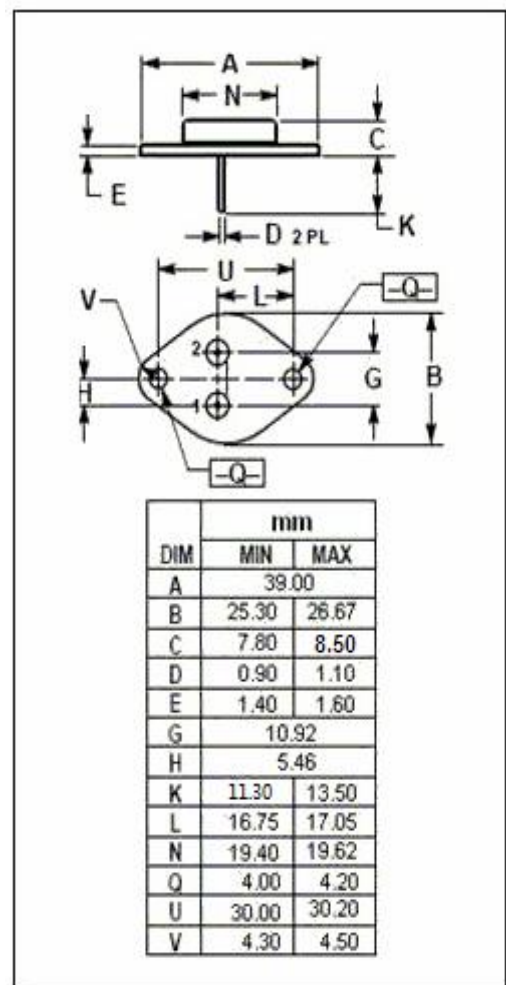
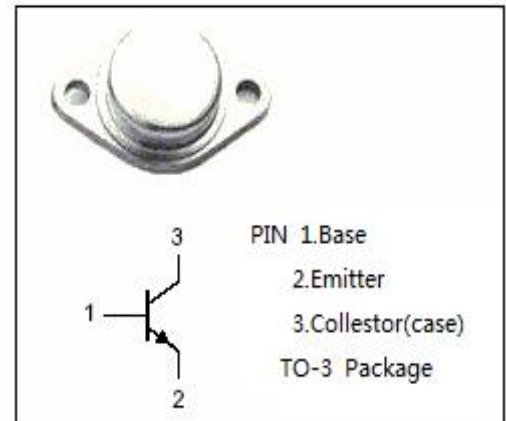
- High Current Capability
- Collector-Emitter Breakdown Voltage:  
:  $V_{(BR)CEO} = 140V(\text{Min.})$
- High Collector Power Dissipation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Designed for high power audio amplifier applications.

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

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 @ $T_c=25^\circ\text{C}$	120	W
$T_j$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-55~150	$^\circ\text{C}$



**isc Silicon NPN Power Transistor****2SD557****ELECTRICAL CHARACTERISTICS****T<sub>j</sub>=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = 10mA; I <sub>B</sub> = 0	140			V
V <sub>CE(sat)</sub> -1	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 10A; I <sub>B</sub> = 1A			1.0	V
V <sub>CE(sat)</sub> -2	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 16A; I <sub>B</sub> = 4A			2.0	V
V <sub>BE(on)</sub>	Base-Emitter On Voltage	I <sub>C</sub> = 8A; V <sub>CE</sub> = 2V			1.5	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 140V; I <sub>E</sub> = 0			2.0	mA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 7V; I <sub>C</sub> = 0			5.0	mA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 5A; V <sub>CE</sub> = 4V	30			

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