

isc Silicon NPN Power Transistor

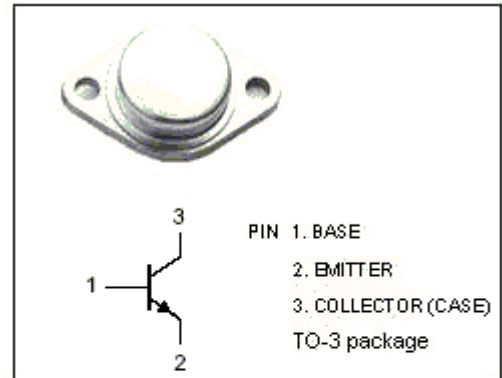
2SD557

DESCRIPTION

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

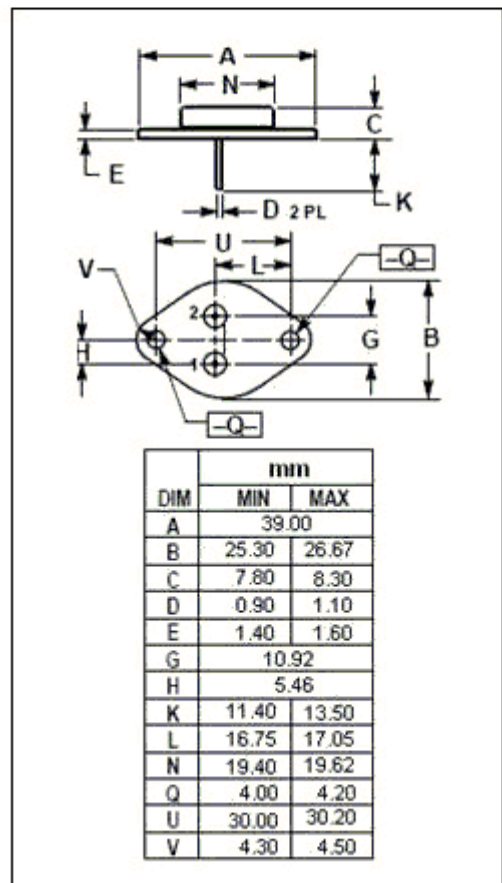
APPLICATIONS

- Designed for high power audio amplifier applications.



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

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_j=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 0.2A; I _B = 0	140			V
V _{CE(sat)-1}	Collector-Emitter Saturation Voltage	I _C = 10A; I _B = 1A			1.0	V
V _{CE(sat)-2}	Collector-Emitter Saturation Voltage	I _C = 16A; I _B = 4A			2.0	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = 8A; V _{CE} = 2V			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 140V; I _E = 0			2.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 7V; I _C = 0			5.0	mA
h _{FE}	DC Current Gain	I _C = 5A; V _{CE} = 4V	30			