

# **isc Silicon NPN Power Transistor**

# 2SC3557

### DESCRIPTION

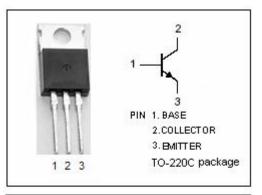
- Low Collector Saturation Voltage : V<sub>CE(sat)</sub>= 1.0V(Max)@ I<sub>C</sub>= 2A
- Collector-Emitter Breakdown Voltage-
  - : V<sub>(BR)CEO</sub>= 80V (Min)
- Wide Area of Safe Operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

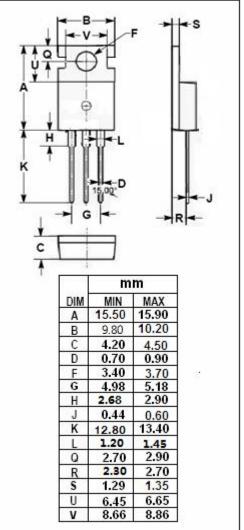
### **APPLICATIONS**

Designed for audio and general purpose applications

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CBO</sub>	Collector-Base Voltage	80	V
V <sub>CEO</sub>	Collector-Emitter Voltage	80	V
V <sub>EBO</sub>	Emitter-Base Voltage	5	V
Ic	Collector Current-Continuous	4	A
I <sub>СМ</sub>	Collector Current-Peak	6	A
Pc	Collector Power Dissipation @ Tc=25℃	40	W
TJ	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature Range	-55~150	Ĉ

## ABSOLUTE MAXIMUM RATINGS(Ta=25°C)





isc website: www.iscsemi.com



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### ELECTRICAL CHARACTERISTICS

#### $T_{c}\text{=}25^{\circ}\!\!\!\mathrm{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	МАХ	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = 30mA; I <sub>B</sub> = 0	80			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = 1mA; I <sub>C</sub> = 0	5			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 2A; I <sub>B</sub> = 0.2A			1.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 2A; I <sub>B</sub> = 0.2A			1.5	v
І <sub>СВО</sub>	Collector Cutoff Current	V <sub>CB</sub> = 80V; I <sub>E</sub> = 0			100	μA
I <sub>CEO</sub>	Collector Cutoff Current	V <sub>CE</sub> = 80V; I <sub>B</sub> = 0			0.5	mA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 5V; I <sub>C</sub> = 0			100	μA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 0.2A ; V <sub>CE</sub> = 1V	100			

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