

# **isc Silicon NPN Power Transistor**

### **DESCRIPTION**

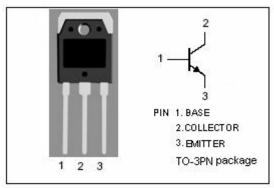
- Collector-Emitter Breakdown Voltage-V<sub>(BR)CEO</sub>= 120V(Min)
- · Good Linearity of hFE
- · High Power Dissipation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

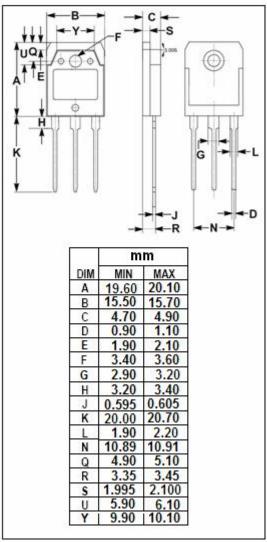
## **APPLICATIONS**

Designed for audio power amplifier applications

# ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
Vсво	Collector-Base Voltage 180		V
V <sub>CEO</sub>	Collector-Emitter Voltage	120	V
V <sub>EBO</sub>	Emitter-Base Voltage	6	V
Ic	Collector Current-Continuous	9	A
Pc	Collector Power Dissipation @ T <sub>C</sub> =25℃	90	W
TJ	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature Range	-55~150	$^{\circ}$







## isc Silicon NPN Power Transistor

2SC2580

### **ELECTRICAL CHARACTERISTICS**

Tc=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = 50mA; I <sub>B</sub> = 0	120			V
V <sub>CE</sub> (sat)	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 5A; I <sub>B</sub> = 0.5A			2.0	V
Ісво	Collector Cutoff Current	V <sub>CB</sub> = 120V; I <sub>E</sub> = 0			10	μА
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 6V; I <sub>C</sub> = 0			10	μА
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 3A; V <sub>CE</sub> = 4V	50			
Сов	Output Capacitance	I <sub>E</sub> = 0; V <sub>CB</sub> = 10V; f= 1.0MHz		250		pF
f⊤	Current-Gain—Bandwidth Product	I <sub>E</sub> = -0.5A; V <sub>CE</sub> = 12V		20		MHz

### ♦ h<sub>FE</sub> Classifications

0	Р	Y
50-100	70-140	90-180

### Notice:

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