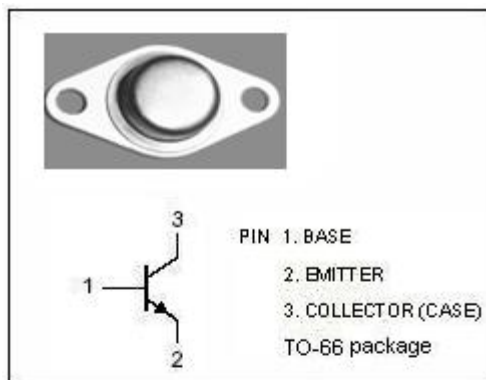


**isc Silicon NPN Power Transistor**
**2SC508**
**DESCRIPTION**

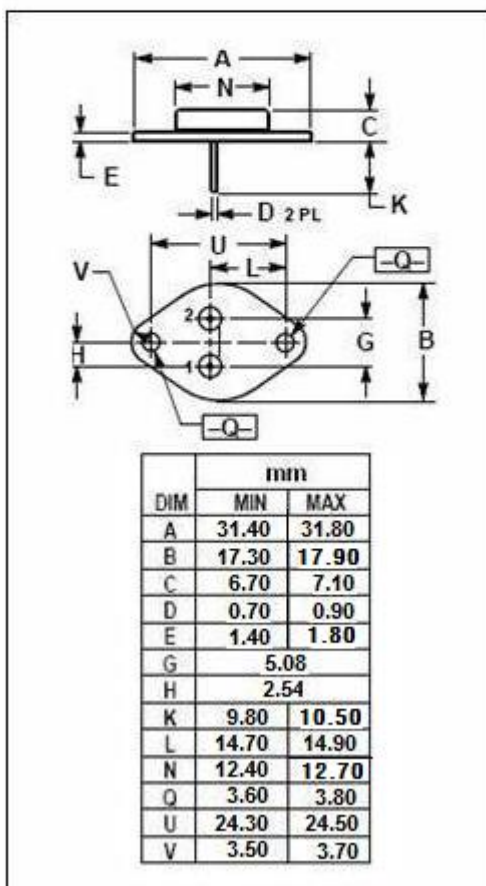
- With TO-66 Package
- Low collector saturation voltage
- Minimum Lot-to-Lot variations for robust device performance and reliable operation.

**APPLICATIONS**

- Designed for switching and wide-band amplifier applications


**ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CB0</sub>	Collector-Base Voltage	180	V
V <sub>CEO</sub>	Collector-Emitter Voltage	60	V
V <sub>EB0</sub>	Emitter-Base Voltage	6	V
I <sub>c</sub>	Collector Current-Continuous	4	A
P <sub>c</sub>	Collector Power Dissipation @ T <sub>c</sub> =25°C	25	W
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature Range	-55~150	°C


**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	5.0	°C/W

**isc Silicon NPN Power Transistor****2SC508****ELECTRICAL CHARACTERISTICS** $T_C=25^\circ\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C= 4A; I_B= 0.4A$		1.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C= 4A; I_B= 0.4A$		1.5	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB}=180V; I_B= 0$		100	$\mu\text{A}$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}= 6V; I_C=0$		100	$\mu\text{A}$
$h_{FE}$	DC Current Gain	$I_C= 4A; V_{CE}= 5V$	20		

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