

**isc Silicon NPN Power Transistor**
**2SC1507**
**DESCRIPTION**

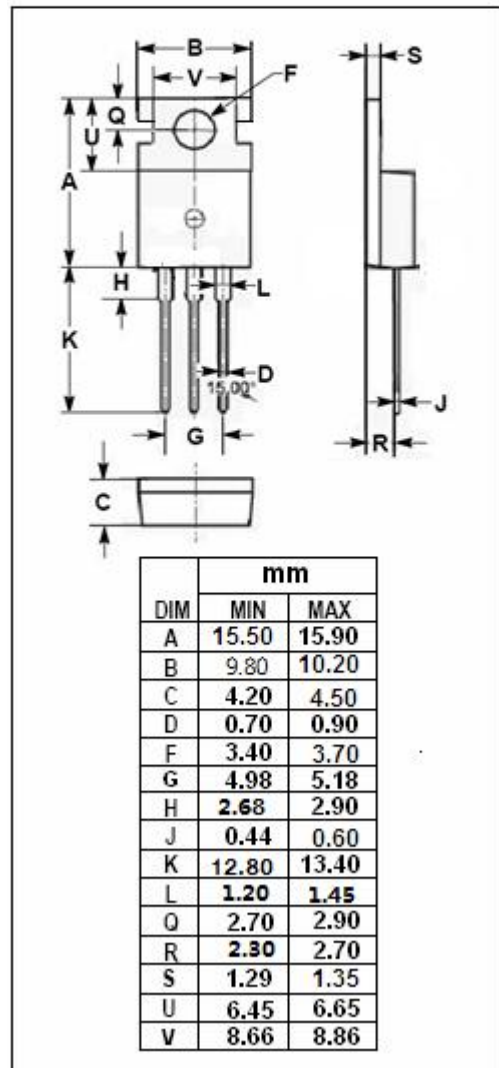
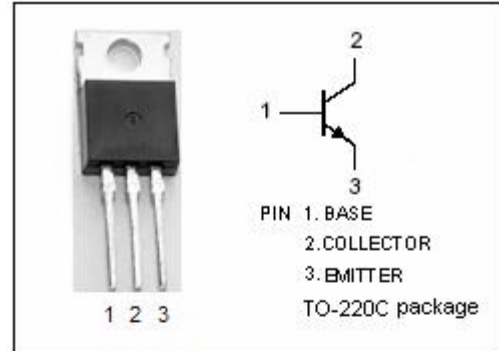
- Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = 300V(\text{Min})$
- Low Collector-Emitter Saturation Voltage-  
:  $V_{CE(sat)} = 2.0V(\text{Max}) @ I_C = 50\text{mA}$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Designed for use in line-operated color TV chroma output Circuits and sound output circuits

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	300	V
$V_{CEO}$	Collector-Emitter Voltage	300	V
$V_{EBO}$	Emitter-Base Voltage	7	V
$I_C$	Collector Current-Continuous	200	mA
$P_C$	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	15	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ\text{C}$



## isc Silicon NPN Power Transistor

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## ELECTRICAL CHARACTERISTICS

T<sub>c</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 50mA; I <sub>B</sub> =5mA			2.0	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 200V ; I <sub>E</sub> = 0			100	nA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 7V ; I <sub>C</sub> = 0			100	nA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 10mA ; V <sub>CE</sub> = 10V	40		240	
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>C</sub> = 10mA; V <sub>CE</sub> = 30V; f <sub>test</sub> = 1.0MHz		80		MHz

◆ h<sub>FE</sub> Classifications

R	O	Y
40-80	70-140	120-240

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