

# isc Silicon PNP Power Transistor

## 2SA1261

### DESCRIPTION

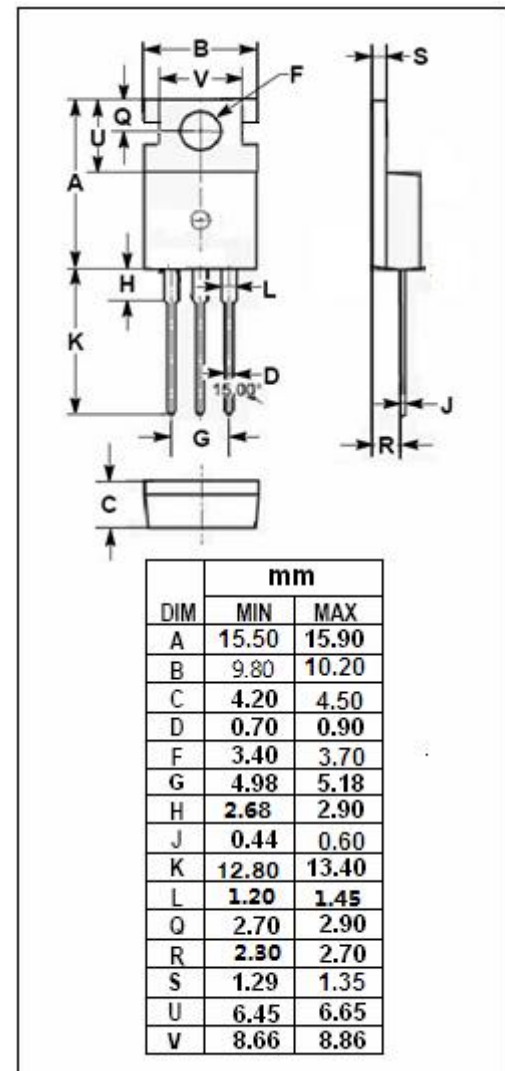
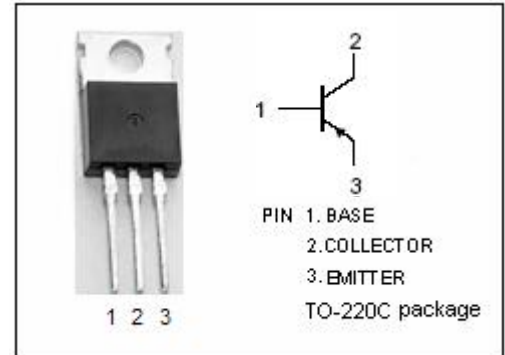
- Low Collector Saturation Voltage-  
:  $V_{CE(sat)} = -0.6V(\text{Max.})@I_C = -5A$
- Fast Switching Speed
- Complement to Type 2SC3157
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### APPLICATIONS

- Developed for high-voltage high-speed switching, and is ideal for use as a driver in devices such as switching regulators, DC/DC converters, and high frequency power amplifiers.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-100	V
$V_{CEO}$	Collector-Emitter Voltage	-100	V
$V_{EBO}$	Emitter-Base Voltage	-7.0	V
$I_C$	Collector Current-Continuous	-10	A
$I_{CM}$	Collector Current-Peak	-20	A
$I_B$	Base Current-Continuous	-3.5	A
$P_C$	Collector Power Dissipation @ $T_a=25^\circ\text{C}$	1.5	W
	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	60	
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ\text{C}$



**isc Silicon PNP Power Transistor****2SA1261****ELECTRICAL CHARACTERISTICS****T<sub>C</sub>=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V <sub>CEO(SUS)</sub>	Collector-Emitter Sustaining Voltage	I <sub>C</sub> = -5.0A; I <sub>B</sub> = -0.5A, L=1mH	-100		V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -5.0A; I <sub>B</sub> = -0.5A		-0.6	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = -5.0A; I <sub>B</sub> = -0.5A		-1.5	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = -100V; I <sub>E</sub> = 0		-10	μ A
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -5V; I <sub>C</sub> = 0		-10	μ A
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = -0.5A; V <sub>CE</sub> = -5V	40	200	
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = -3.0A; V <sub>CE</sub> = -5V	40	200	
h <sub>FE-3</sub>	DC Current Gain	I <sub>C</sub> = -5.0A; V <sub>CE</sub> = -5V	20		

**◆ h<sub>FE-2</sub> Classifications**

M	L	K
40-80	60-120	100-200

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