

**isc Silicon NPN Power Transistor**
**KSC5027**
**DESCRIPTION**

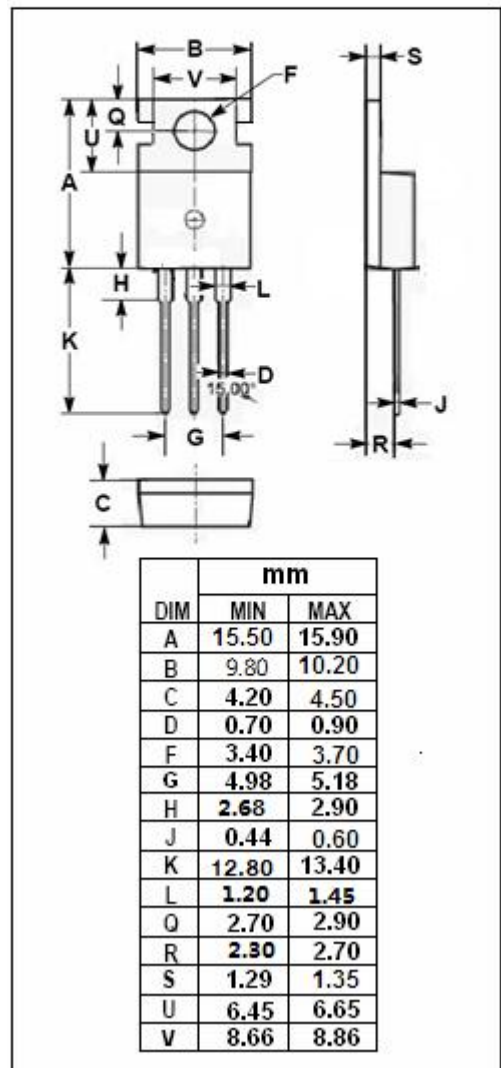
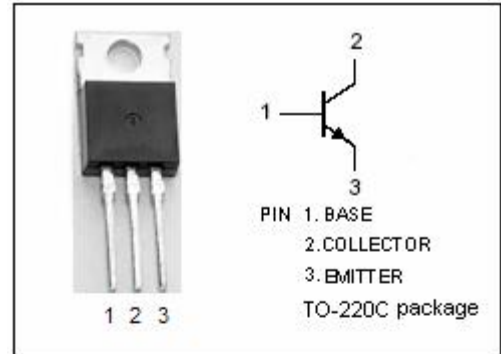
- Collector-Emitter Sustaining Voltage-  
:V<sub>CEO(SUS)</sub>= 800V(Min)
- High Speed Switching
- Low Collector Saturation Voltage
- Wide Area of Safe Operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Designed for switching regulator, DC-DC converter and ultrasonic appliance applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CBO</sub>	Collector-Base Voltage	1100	V
V <sub>CEO</sub>	Collector-Emitter Voltage	800	V
V <sub>EBO</sub>	Emitter-Base Voltage	7	V
I <sub>C</sub>	Collector Current-Continuous	3	A
I <sub>CM</sub>	Collector Current-Peak	10	A
I <sub>B</sub>	Base Current-Continuous	1.5	A
P <sub>C</sub>	Collector Power Dissipation @ T <sub>C</sub> =25°C	50	W
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature Range	-55~150	°C



**ELECTRICAL CHARACTERISTICS**

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CEQ(SUS)</sub>	Collector-Emitter Sustaining Voltage	I <sub>C</sub> = 5mA; I <sub>B</sub> = 0	800			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 1.5A; I <sub>B</sub> = 0.3A			2.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 1.5A; I <sub>B</sub> = 0.3A			1.5	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 800V ; 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> = 0.2A ; V <sub>CE</sub> = 5V	10		40	
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = 1A ; V <sub>CE</sub> = 5V	8			

**◆ h<sub>FE-1</sub> Classifications**

N	R	O
10-20	15-30	20-40

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