

isc Silicon NPN Power Transistor
KSC5027
DESCRIPTION

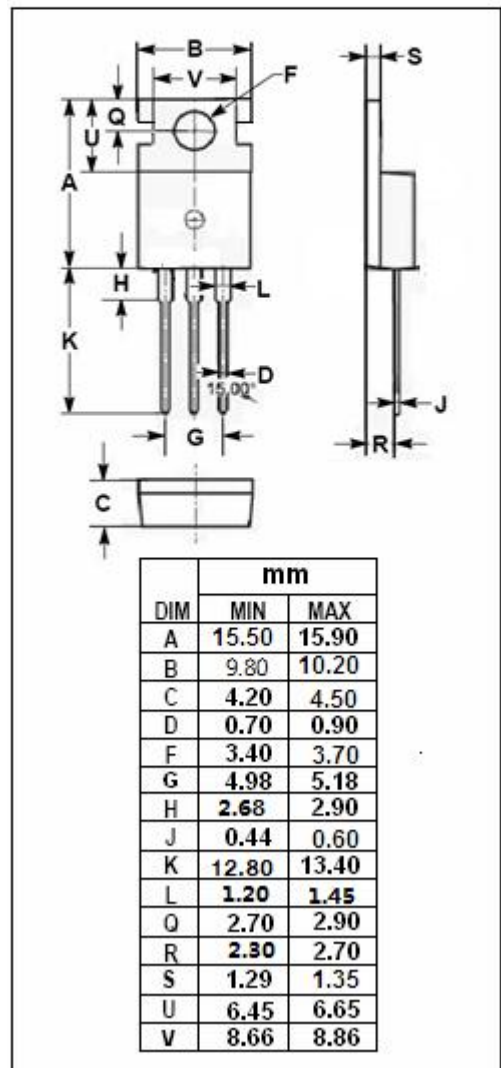
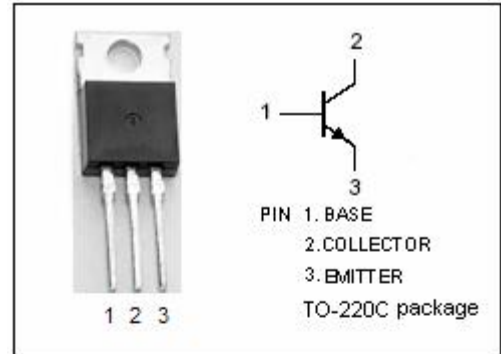
- Collector-Emitter Sustaining Voltage-
:V_{CEO(SUS)}= 800V(Min)
- High Speed Switching
- Low Collector Saturation Voltage
- Wide Area of Safe Operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

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

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-Base Voltage	1100	V
V _{CEO}	Collector-Emitter Voltage	800	V
V _{EBO}	Emitter-Base Voltage	7	V
I _C	Collector Current-Continuous	3	A
I _{CM}	Collector Current-Peak	10	A
I _B	Base Current-Continuous	1.5	A
P _C	Collector Power Dissipation @ T _C =25°C	50	W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-55~150	°C



ELECTRICAL CHARACTERISTICS

 T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 5mA; I _B = 0	800			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 1.5A; I _B = 0.3A			2.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 1.5A; I _B = 0.3A			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 800V ; I _E = 0			10	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			10	μ A
h _{FE-1}	DC Current Gain	I _C = 0.2A ; V _{CE} = 5V	10		40	
h _{FE-2}	DC Current Gain	I _C = 1A ; V _{CE} = 5V	8			

◆ h_{FE-1} Classifications

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

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