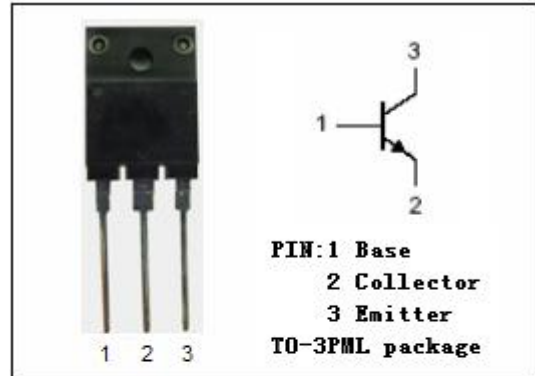


isc Silicon NPN Power Transistor
2SC3507
DESCRIPTION

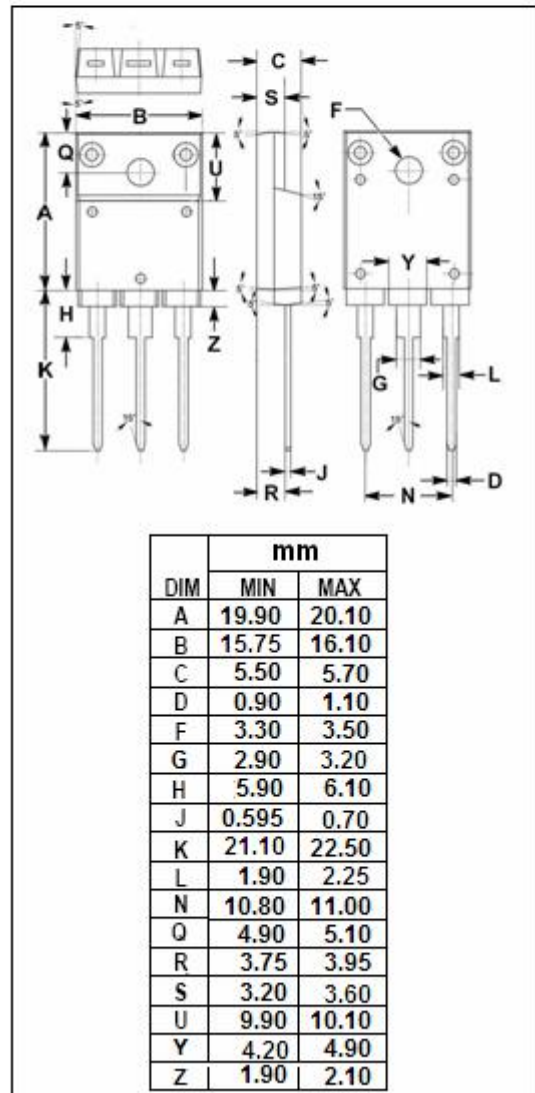
- High Collector-Base Breakdown Voltage-
: $V_{(BR)CBO} = 1000V(\text{Min})$
- High Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for switching regulator and high voltage switching applications.


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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1000	V
V_{CEO}	Collector-Emitter Voltage	800	V
V_{EBO}	Emitter-Base voltage	7	V
I_C	Collector Current-Continuous	5	A
I_{CM}	Collector Current-Peak	10	A
I_B	Base Current-Continuous	3	A
P_C	Collector Power Dissipation @ $T_c = 25^\circ\text{C}$	80	W
	Collector Power Dissipation @ $T_a = 25^\circ\text{C}$	3	
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_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 1mA ; I _B = 0	800			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 3A ; I _B = 0.6A			1.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 3A ; I _B = 0.6A			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 1000V ; I _E = 0			50	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 7V ; I _C = 0			50	μ A
h _{FE}	DC Current Gain	I _C = 3A ; V _{CE} = 5V	6			
f _T	Current-Gain—Bandwidth Product	I _C = 0.5A ; V _{CE} = 5V ; f= 1MHz		6		MHz

NOTICE:

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