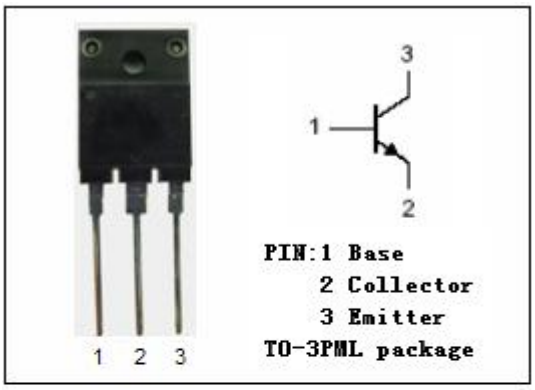
isc Silicon NPN Power Transistor — 2SC3507

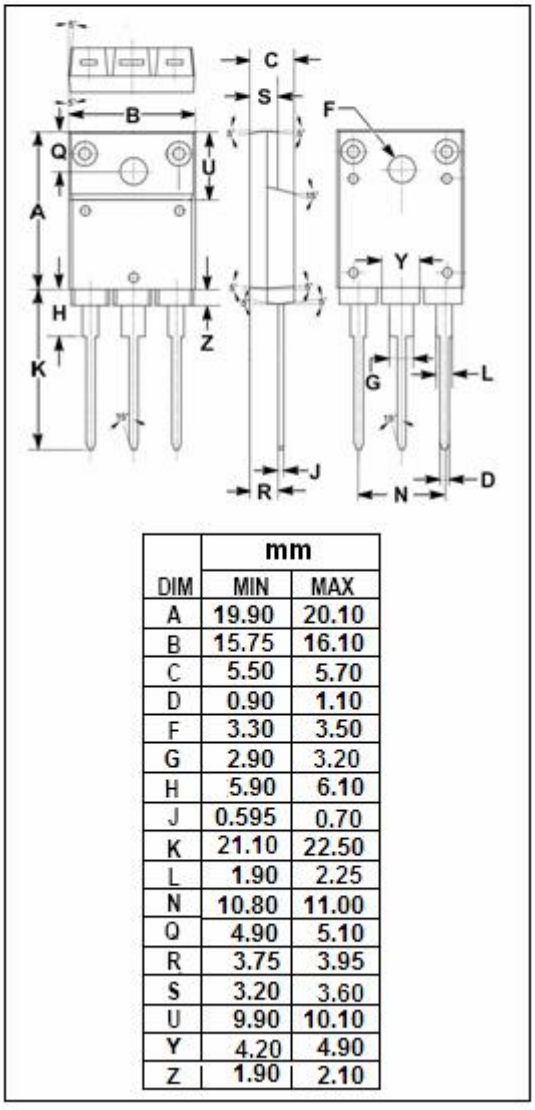
DESCRIPTION

- High Collector-Base Breakdown Voltage-
  : $V_{(BR)CBO}$= 1000V(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.





DIM	mm MIN	mm MAX
A	19.90	20.10
B	15.75	16.10
C	5.50	5.70
D	0.90	1.10
F	3.30	3.50
G	2.90	3.20
H	5.90	6.10
J	0.595	0.70
K	21.10	22.50
L	1.90	2.25
N	10.80	11.00
Q	4.90	5.10
R	3.75	3.95
S	3.20	3.60
U	9.90	10.10
Y	4.20	4.90
Z	1.90	2.10

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

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℃	80	W
	Collector Power Dissipation @ T_a=25℃	3	
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

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ELECTRICAL CHARACTERISTICS

T_C=25℃ 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	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 7V; I_C= 0			50	μA
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