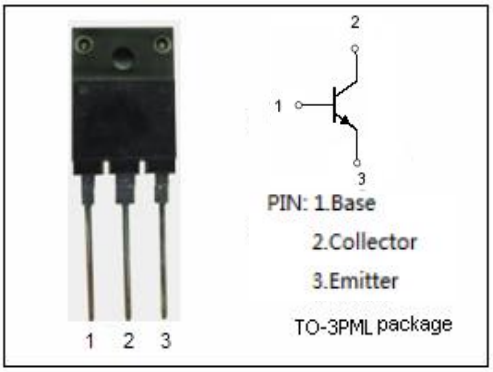
isc Silicon NPN Power Transistor 2SC5302



DESCRIPTION

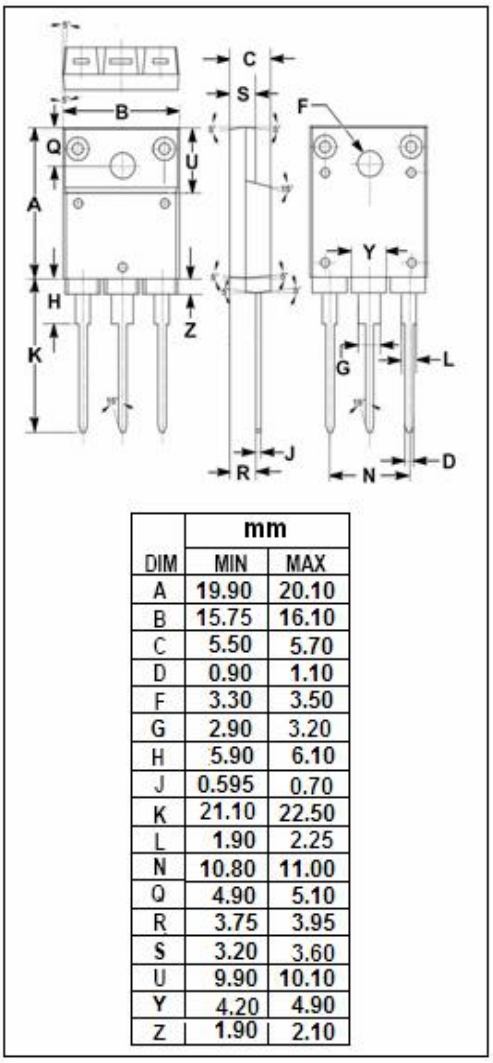
- High Breakdown Voltage
  :V_{CBO}= 1500V (Min)
- High Speed Switching
- High Reliability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for inverter lighting applications.

Absolute maximum ratings (T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1500	V
V_{CEO}	Collector-Emitter Voltage	800	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	15	A
I_{CM}	Collector Current-Peak	35	A
P_C	Collector Power Dissipation @T_a=25℃	3	W
	Collector Power Dissipation @T_C=25℃	75	
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	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

isc Silicon NPN Power Transistor 2SC5302

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= 100mA; I_B= 0	800			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 12A; I_B= 3A			5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 12A; I_B= 3A			1.5	V
I_{CES}	Collector Cutoff Current	V_{CE}= 1500V; R_{BE}= 0			1	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 4V; I_C= 0			1	mA
I_{CBO}	Collector Cutoff Current	V_{CB}= 800V; I_E= 0			10	μA
h_{FE-1}	DC Current Gain	I_C= 1A; V_{CE}= 5V	20		30	
h_{FE-2}	DC Current Gain	I_C= 12A; V_{CE}= 5V	4		7	