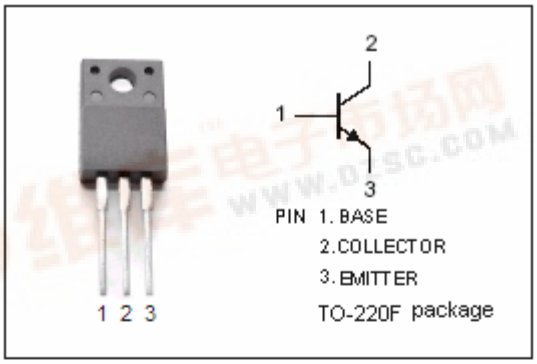
isc Silicon NPN Power Transistor 2SC5305

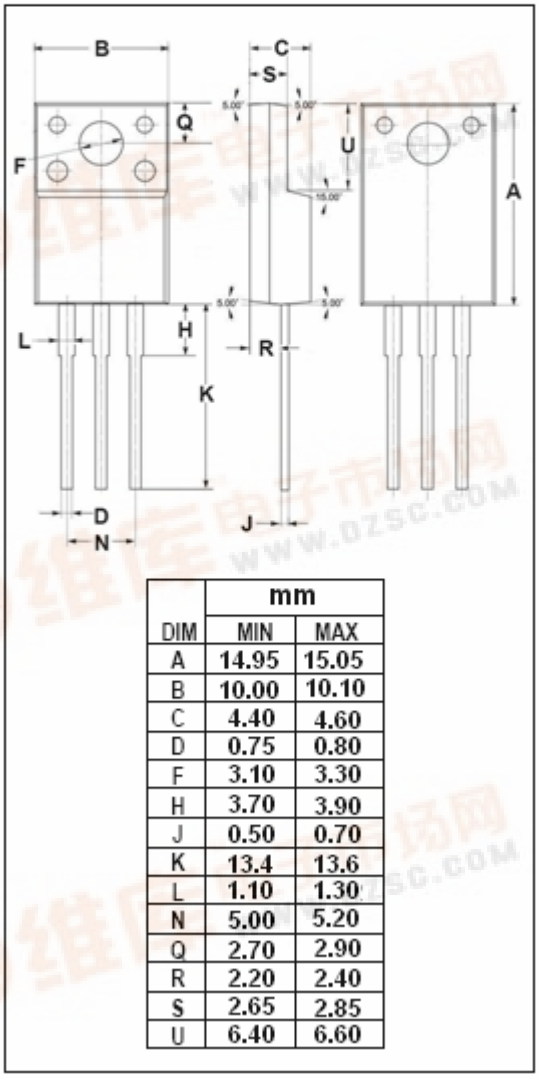


DESCRIPTION

- High Breakdown Voltage
  :$V_{(BR)CBO}$= 1200V (Min)
- High Speed Switching

APPLICATIONS

- Designed for inverter lighting applications.



DIM	mm MIN	mm MAX
A	14.95	15.05
B	10.00	10.10
C	4.40	4.60
D	0.75	0.80
F	3.10	3.30
H	3.70	3.90
J	0.50	0.70
K	13.4	13.6
L	1.10	1.30
N	5.00	5.20
Q	2.70	2.90
R	2.20	2.40
S	2.65	2.85
U	6.40	6.60

Absolute maximum ratings (T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1200	V
V_{CEO}	Collector-Emitter Voltage	600	V
V_{EBO}	Emitter-Base Voltage	9	V
I_C	Collector Current-Continuous	6	A
I_{CM}	Collector Current-Peak	12	A
P_C	Collector Power Dissipation @T_a=25℃	2	W
	Collector Power Dissipation @T_C=25℃	35	
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

isc Silicon NPN Power Transistor 2SC5305

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= 0.1A; I_B= 0	600			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 3A; I_B= 0.6A			1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 3A; I_B= 0.6A			1.5	V
h_{FE-1}	DC Current Gain	I_C= 0.3A; V_{CE}= 5V	30		50	
h_{FE-2}	DC Current Gain	I_C= 2.5A; V_{CE}= 5V	10			
I_{CBO}	Collector Cutoff Current	V_{CB}= 600V; I_E= 0			10	μA
I_{CES}	Collector Cutoff Current	V_{CE}= 1200V; R_{BE}= 0			1.0	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 9V; I_C= 0			1.0	mA
Switching Times						
t_s	Storage Time	I_C= 3.5A;I_{B1}= 0.6A; I_{B2}= -1.2A			2.5	μs
t_f	Fall Time				0.15	μs