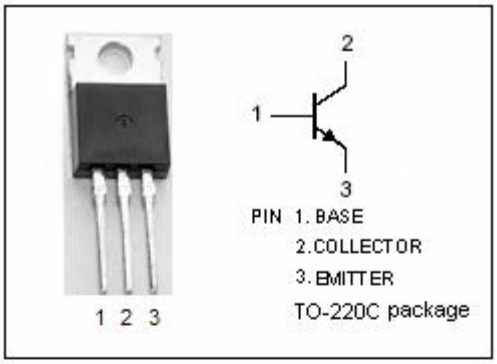
isc Silicon NPN Power Transistor BUL57

DESCRIPTION

- Collector–Emitter Sustaining Voltage
  : $V_{CEO(SUS)}$ = 400V(Min.)
- Collector Saturation Voltage
  : $V_{CE(sat)}$ = 0.65V(Max) @ I_C= 2A
- High Speed Switching



APPLICATIONS

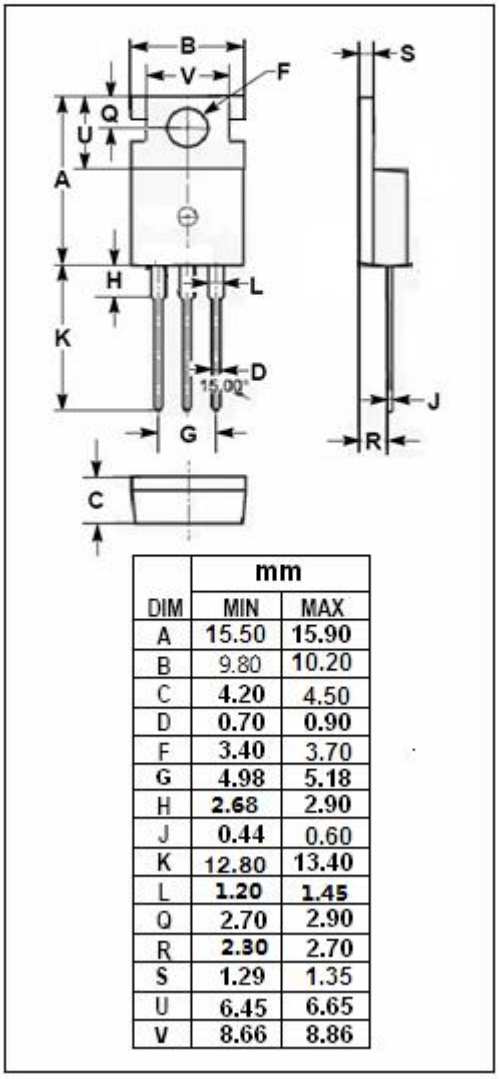
- Designed for use in lighting applications and low cost switch-mode power supplies.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CES}	Collector-Emitter Voltage	700	V
V_{CEO}	Collector-Emitter Voltage	400	V
V_{EBO}	Emitter-Base Voltage	9	V
I_C	Collector Current-Continuous	8	A
I_{CM}	Collector Current-peak	16	A
I_B	Base Current-Continuous	4	A
I_{BM}	Base Current-Peak	7	A
P_C	Collector Power Dissipation T_C=25℃	85	W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-65~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	3.5	℃/W
$R_{th\ j\text{-}A}$	Thermal Resistance,Junction to Ambient	62.5	℃/W



DIM	mm MIN	MAX
A	15.50	15.90
B	9.80	10.20
C	4.20	4.50
D	0.70	0.90
F	3.40	3.70
G	4.98	5.18
H	2.68	2.90
J	0.44	0.60
K	12.80	13.40
L	1.20	1.45
Q	2.70	2.90
R	2.30	2.70
S	1.29	1.35
U	6.45	6.65
V	8.66	8.86

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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= 10mA; Ib=0	400			V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	I_C= 2A ;I_B= 0.4A			0.65	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	I_C= 3A ;I_B= 0.6A			0.75	V
$V_{CE(sat)-3}$	Collector-Emitter Saturation Voltage	I_C= 4A ;I_B= 0.8A			1.2	V
$V_{CE(sat)-4}$	Collector-Emitter Saturation Voltage	I_C= 5A ;I_B= 1A			2.0	V
$V_{CE(sat)-5}$	Collector-Emitter Saturation Voltage	I_C= 8A ;I_B= 2A		2.0		V
$V_{BE(sat)-1}$	Base-Emitter Saturation Voltage	I_C= 2A ;I_B= 0.4A			1.2	V
$V_{BE(sat)-2}$	Base-Emitter Saturation Voltage	I_C= 5A ;I_B= 1A			1.6	V
I_{CES}	Collector Cutoff Current	V_{CE}= RatedV_{CES};V_{BE}=0 V_{CE}= RatedV_{CES};V_{BE}=0,T_C= 125℃			0.1 0.5	mA
I_{CEO}	Collector Cut-off Current (IB = 0)	V_{CE} = 400 V			250	uA
h_{FE-1}	DC Current Gain	I_C= 2A; V_{CE}= 5V	15		40	
h_{FE-2}	DC Current Gain	I_C= 4A; V_{CE}= 5V	6			
h_{FE-3}	DC Current Gain	I_C= 10mA; V_{CE}= 5V	8			