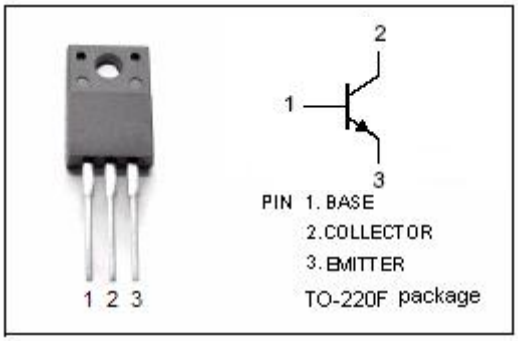
SPTECH Silicon NPN Power Transistor



DESCRIPTION

- Collector–Emitter Sustaining Voltage
  : $V_{CEO(SUS)}$ = 800V(Min.)
- Low Collector Saturation Voltage
  : $V_{CE(sat)}$ =1V(Max) @ I_C= 1.2A

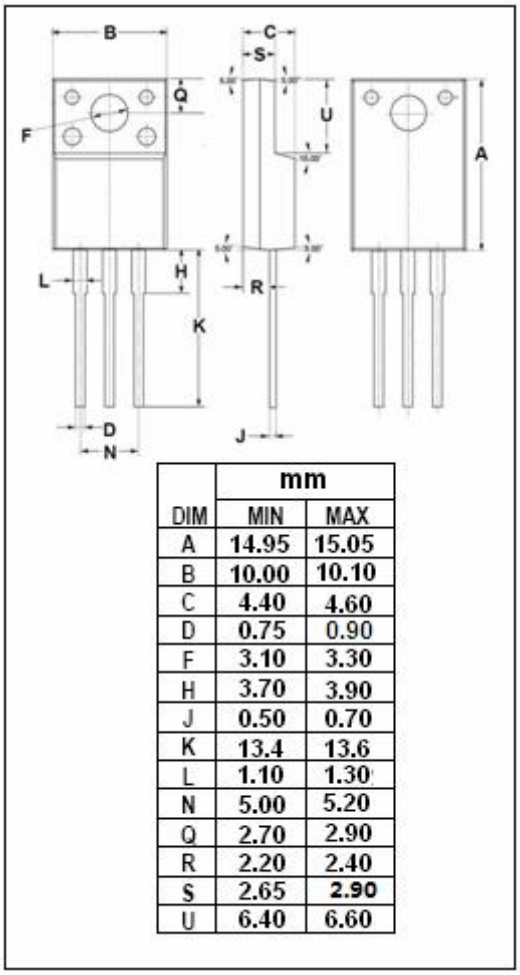
APPLICATIONS

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

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ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Emitter Voltage	900	V
V_{CEO}	Collector-Emitter Voltage	800	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	3	A
I_{CM}	Collector Current-peak t_p<5ms	5	A
I_B	Base Current-Continuous	1	A
P_C	Collector Power Dissipation T_C=25℃	25	W
	Collector Power Dissipation T_a=25℃	2	W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	MAX
A	14.95	15.05
B	10.00	10.10
C	4.40	4.60
D	0.75	0.90
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	2.90
U	6.40	6.60

SPTECH Silicon NPN Power Transistor

ELECTRICAL CHARACTERISTICS

T_C =25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CBO}$	Collector -Base Breakdown Voltage	I_C= 1mA; I_E= 0	900			V
$V_{(BR)CEO}$	Collector - Emitter Breakdown Voltage	I_C= 10mA; I_B= 0	800			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 1.2A; I_B= 0.24A			1	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 1.2A; I_B= 0.24A			1.3	V
I_{CBO}	Collector Cutoff Current	V_{CE}=720V; I_E= 0			0.1	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 7V; I_C= 0			10	uA
h_{FE-1}	DC Current Gain	I_C= 1mA; V_{CE}= 5V	10			
h_{FE-2}	DC Current Gain	I_C= 0.15A; V_{CE}= 5V	15			
Switching Times, Inductive Load						
t_s	Storage Time	I_{B1}= 0.24A;			4	μs
t_f	Fall Time				0.5	μs