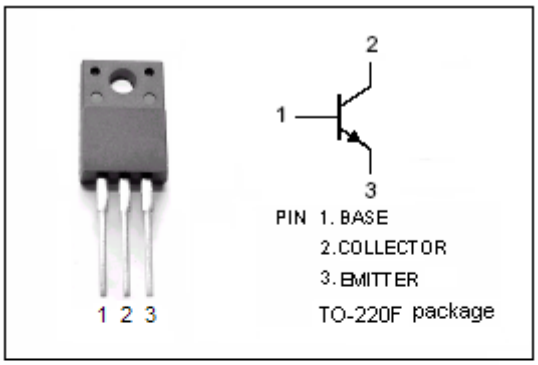
isc Silicon NPN Power Transistor BUV46FI



DESCRIPTION

- Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$= 400V(Min.)
- High Speed Switching

APPLICATIONS

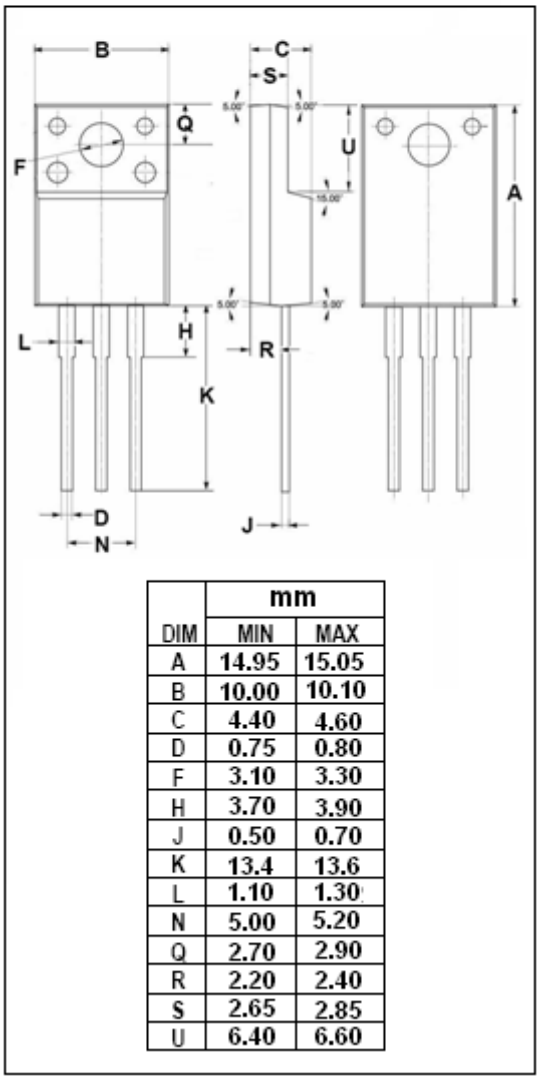
- Designed for high voltage, fast switching applications.

ABSOLUTE MAXIMUM RATINGS (T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CES}	Collector-Emitter Voltage V_{BE}= 0	850	V
V_{CEX}	Collector-Emitter Voltage V_{BE}= -2.5V	850	V
V_{CEO}	Collector-Emitter Voltage	400	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	5	A
I_B	Base Current-Continuous	3	A
P_C	Collector Power Dissipation @T_C=25℃	30	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	4.12	℃/W



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

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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= 0.1A; I_B= 0	400			V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	I_C= 2.5A; I_B= 0.5A			1.5	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	I_C= 3.5A; I_B= 0.7A			5.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 2.5A; I_B= 0.5A			1.3	V
I_{CER}	Collector Cutoff Current	V_{CE}= 850V; R_{BE}=10Ω V_{CE}= 850V; R_{BE}=10Ω;T_C=125℃			0.1 1.0	mA
I_{CEX}	Collector Cutoff Current	V_{CE}= 850V; V_{BE}=-2.5V V_{CE}= 850V; V_{BE}=-2.5V;T_j= 125℃			0.3 2.0	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 7V; I_C= 0			1.0	mA
Switching Times						
t_{on}	Turn-on Time	I_C= 2.5A;I_{B1}=-I_{B2}= 0.5A;V_{CC}= 150V			1.0	μs
t_s	Storage Time				3.0	μs
t_f	Fall Time				0.8	μs