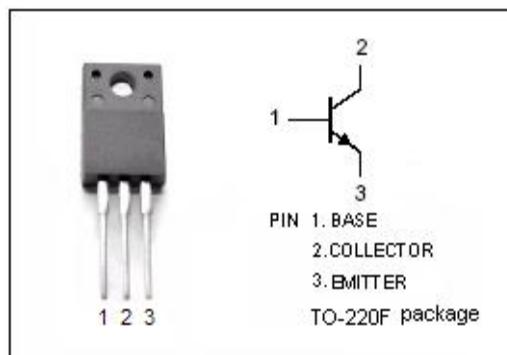


isc Silicon NPN Power Transistor
BUV46FI
DESCRIPTION

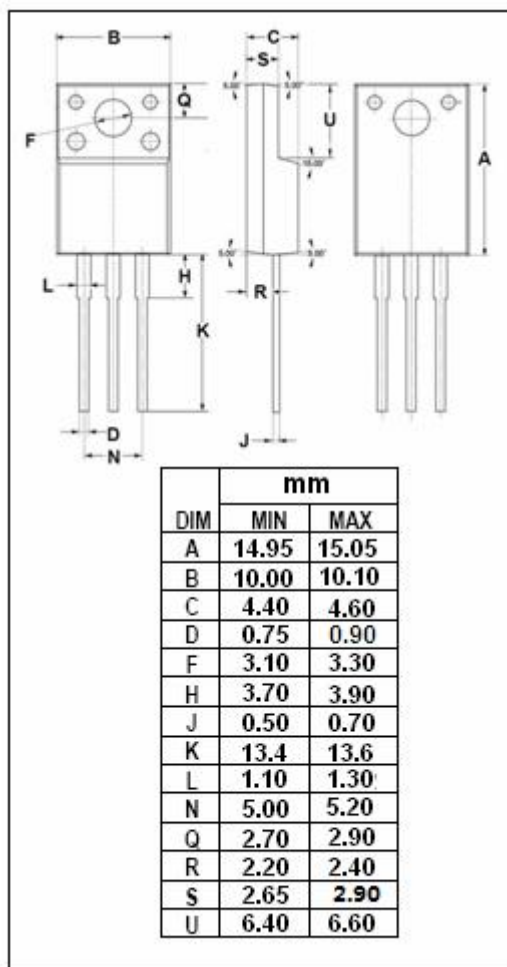
- Collector-Emitter Sustaining Voltage:
: $V_{CEO(SUS)} = 400V(\text{Min.})$
- High Speed Switching
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for high voltage, fast switching applications.


ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1000	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 @ $T_c=25^\circ\text{C}$	30	W
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-65~150	$^\circ\text{C}$


THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	4.12	$^\circ\text{C}/\text{W}$

isc Silicon NPN Power Transistor**BUV46FI****ELECTRICAL CHARACTERISTICS**T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE0(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 50mA; 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 _{CBO}	Collector Cutoff Current	V _{CE} = 1000V; I _B = 0			0.3	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 7V; I _C = 0			1.0	mA

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