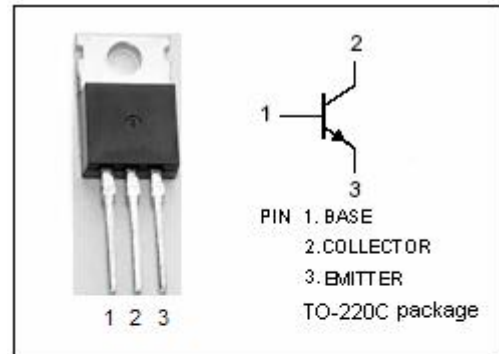


isc Silicon NPN Power Transistor
BUL1102E
DESCRIPTION

- High Voltage
- High Speed Switching
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

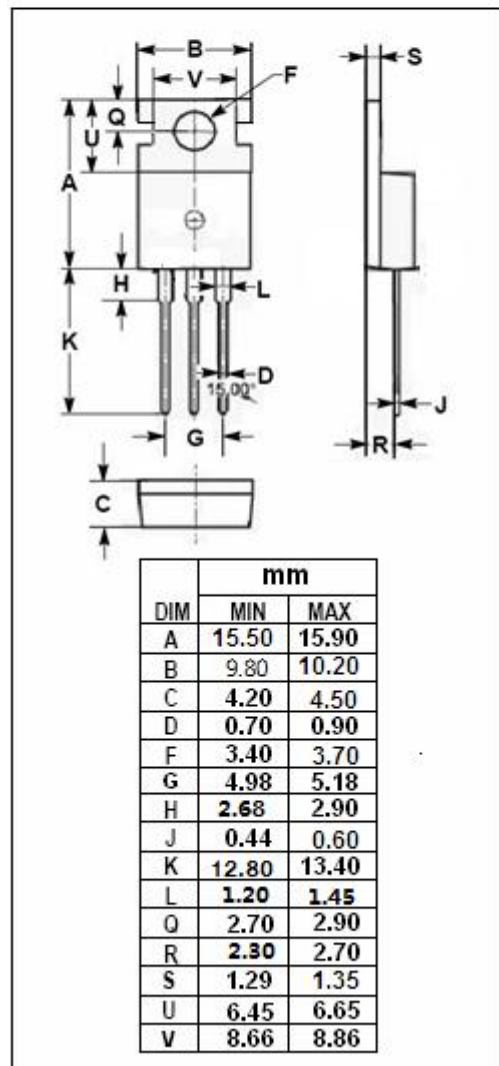
• Four lamp electronic ballast for : 120v mains in push-pull configuration


ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-Base Voltage	1100	V
V _{CES}	Collector-Emitter Voltage V _{BE} = 0	1100	V
V _{CEO}	Collector-Emitter Voltage	450	V
V _{EBO}	Emitter-Base Voltage	12	V
I _C	Collector Current-Continuous	4	A
I _{CM}	Collector Current-Peak	8	A
I _B	Base Current	2	A
I _{BM}	Base Current-Peak	4	A
P _C	Collector Power Dissipation @T _C =25°C	100	W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-65~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	1.25	°C/W



isc Silicon NPN Power Transistor

BUL1102E

ELECTRICAL CHARACTERISTICS

T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 100mA; I _B = 0	450			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 2A; I _B = 0.4A			1.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 2A; I _B = 0.4A			1.5	V
I _{CES}	Collector Cutoff Current	V _{CE} = 1100V; V _{BE} = 0			0.1	mA
I _{EBO}	Collector Cutoff Current	V _{CE} = 12V; I _B = 0			1	mA
h _{FE-1}	DC Current Gain	I _C = 250mA; V _{CE} = 5V	35		70	
h _{FE-2}	DC Current Gain	I _C = 2A; V _{CE} = 5V	12		20	

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