

DESCRIPTION

- High breakdown voltage
- High switching speed
- High current capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

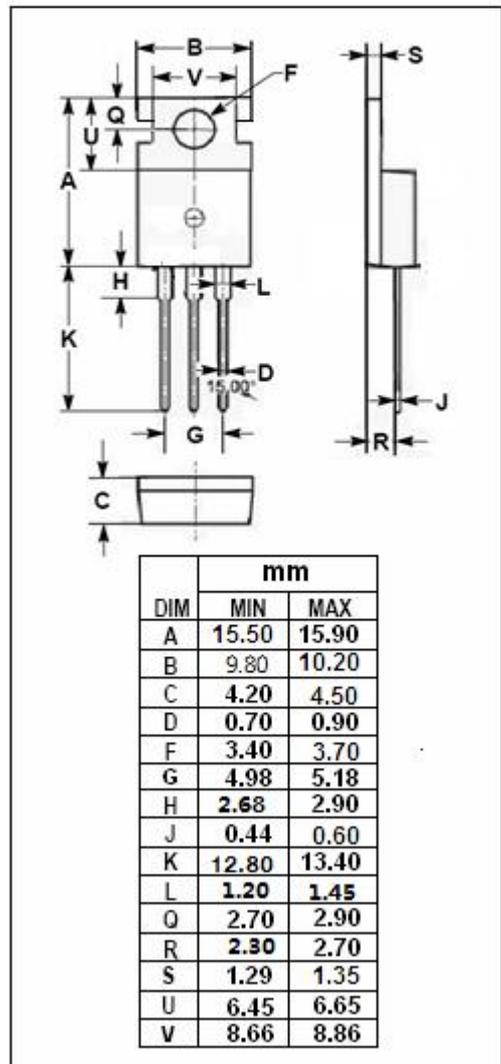
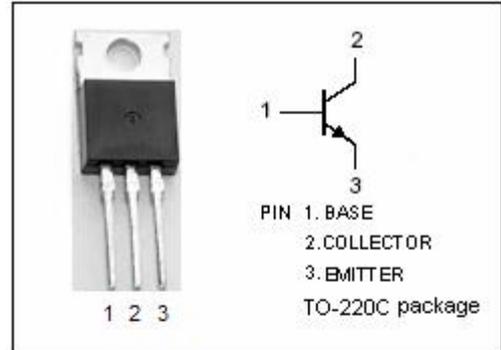
- Energy-saving light
- Electronic ballasts
- High frequency switching power supply
- High frequency power transform

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CEV}	Collector-Emitter Voltage	700	V
V _{CEO}	Collector-Emitter Voltage	400	V
V _{EBO}	Emitter-Base Voltage	9	V
I _c	Collector Current-Continuous	12	A
I _{CM}	Collector Current-peak	24	A
I _B	Base Current	6	A
I _{BM}	Base Current-Peak	12	A
P _C	Collector Power Dissipation T _C =25°C	100	W
T _i	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-55~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	1.25	°C/W
R _{th j-a}	Thermal Resistance, Junction to Ambient	62.5	°C/W



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 = 10mA; I _B = 0	400			V
V _{CE(sat)-1}	Collector-Emitter Saturation Voltage	I _C = 5A ;I _B = 1A			1.2	V
V _{CE(sat)-2}	Collector-Emitter Saturation Voltage	I _C = 8A ;I _B = 1.6A			1.8	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 8A ;I _B = 1.6A			1.8	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 700V; I _E =0			0.1	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 10V; I _C = 0			0.01	mA
h _{FE-1}	DC Current Gain	I _C = 5A; V _{CE} = 5V	8		40	
h _{FE-2}	DC Current Gain	I _C = 8A; V _{CE} = 5V	5			

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