

DESCRIPTION

- Low Collector-Emitter Saturation Voltage
- Fast Switching Speeds
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

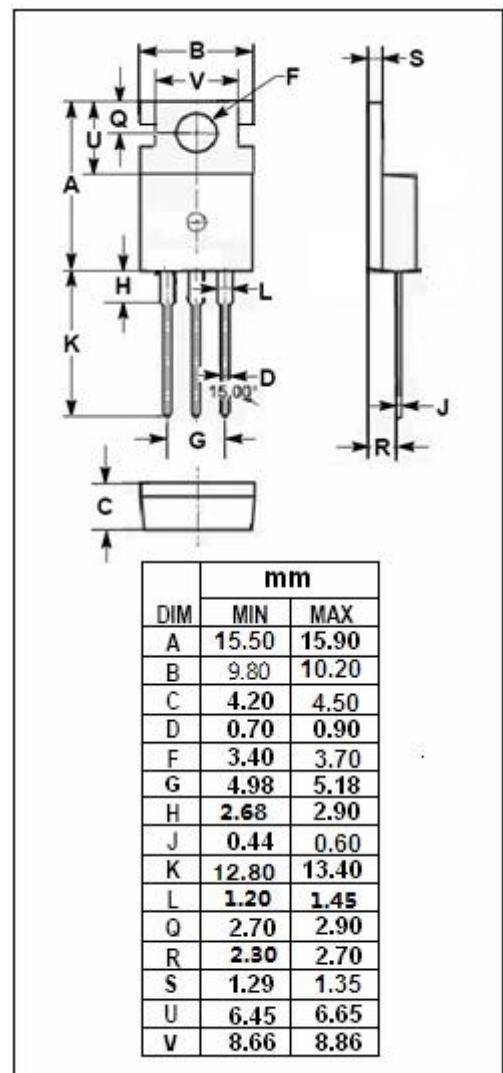
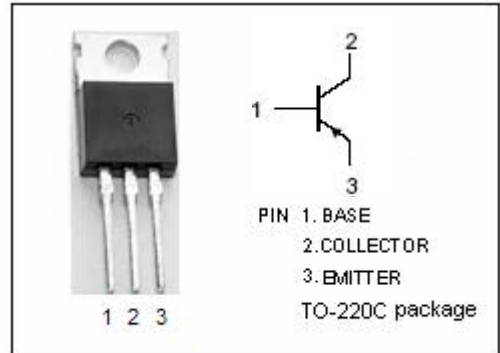
- Designed for general purpose power amplification and switching such as output or driver stages in applications such as switching regulators, converters and power amplifier.

ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CEO}	Collector-Emitter Voltage	-60	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current-Continuous	-10	A
I _{CM}	Collector Current-Peak	-20	A
P _C	Collector Power Dissipation @T _C =25°C	70	W
T _J	Junction Temperature	-55~150	°C
T _{stg}	Storage Temperature Range	-55~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	1.8	°C/W
R _{th j-a}	Thermal Resistance, Junction to Ambient	62.5	°C/W



ELECTRICAL CHARACTERISTICST_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -8A ; I _B = -0.4 A			-1.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = -8A ; I _B = -0.8 A			-1.5	V
I _{CES}	Collector Cutoff Current	V _{CE} =Rated V _{CEO} ; V _{BE} = 0			-10	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V; I _C = 0			-10	μ A
h _{FE-1}	DC Current Gain	I _C = -2A ; V _{CE} = -1V	60			
h _{FE-2}	DC Current Gain	I _C = -4A ; V _{CE} = -1V	40			
f _T	Current-Gain—Bandwidth Product	I _C =-0.5A; V _{CE} =-10V;		40		MHz

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