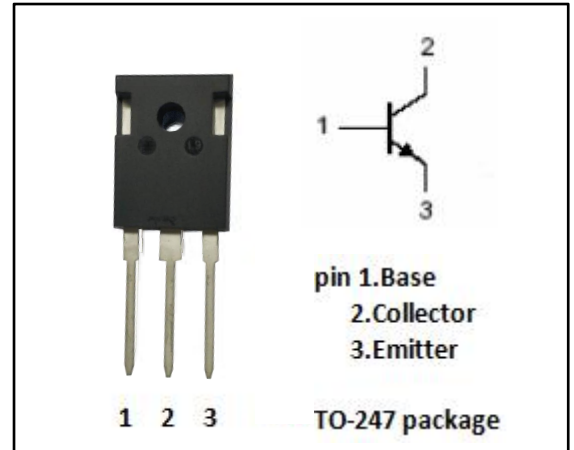


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DESCRIPTION

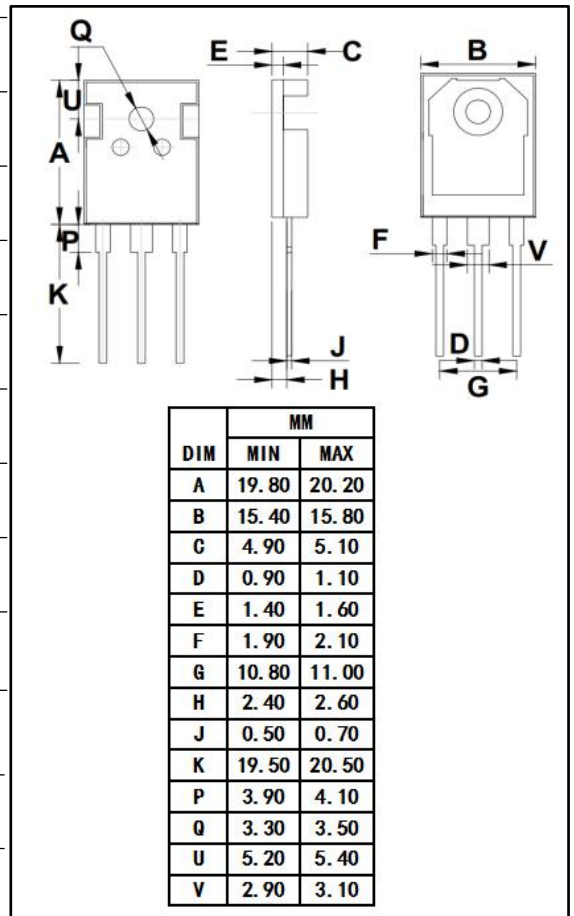
- High current
- High Speed Switching
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Converters
- Inverters
- Switching regulators
- Motor control systems


ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBS}	Collector-Emitter Voltage (V _{BE} = 0)	500	V
V _{CEO}	Collector-Emitter Voltage	250	V
V _{EBO}	Emitter-Base Voltage	7.0	V
I _C	Collector Current-Continuous	60	A
I _{CM}	Collector Current-Peak	70	A
P _C	Collector Power Dissipation @T _C =25°C	180	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	0.7	°C/W

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BUTW92

ELECTRICAL CHARACTERISTICS

T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Breakdown Voltage	I _C = 5mA; V _{EB} =0	500		V
V _{EBO}	Emitter-Base Breakdown Voltage	I _E = 1mA	7		
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 60A; I _B = 15A		1.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage 	I _C = 60A; I _B = 15A		1.9	V
I _{CES}	Collector Cutoff Current	V _{CE} =RatedV _{CES} ; V _{BE} = 0 V _{CE} =RatedV _{CES} ; V _{BE} = 0; T _C =100°C		0.05 1.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5.0V; I _C = 0		0.05	mA
h _{FE-1}	DC Current Gain	I _C = 60A; V _{CE} = 3V	9		
h _{FE-2}	DC Current Gain	I _C = 5A; V _{CE} = 3V		65	

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