

# MBR30U100CTH/FCTH/CRH/CGH

## Power Schottky Rectifier - 30Amp 100Volt

#### Features

-Plastic package has Underwriters Laboratory Flammability Classifications 94V-0

-High Junction Temperature Capability

-Low forward voltage, high current capability

-High surge capacity

- -Low power loss, high efficiency
- -ESD performance human body mode > 8 KV
- -Halogen-Free

#### □ Application

-AC/DC Switching Adaptor and other Switching Power Supply

#### ☐ Absolute maximum ratings

Symbol	Ratings	Unit	Conditions	
lf(AV)	30	А	Average Forward Current	
Vrrm	100	V	Repetitive Peak Reverse Voltage	
IFSM	350	А	Peak Forward Surge Current	
VF	0.56	V	Forward Voltage Drop	
Tj, Tstg	-50 to +175	°C	Operating and Storage Temperature	

#### Electrical characteristics

Parameters	Symbol	Ratings	Conditions
			Per Leg at IF = 15A
Maximum Instantaneous Forward Voltage	VF	0.72V	Tc = 25°C
		0.56V	Tc = 125°C
			Per Leg at VR = 100V
Maximum Reverse Leakage Current	lr	0.05mA	Tc = 25°C
		10mA	Tc = 125°C
			Per Leg
Typical Thermal Resistance, Junction to Case	Rθ (j-c)	2.2 °C/W	TO-220AB / TO-262 / TO-263
		4.5 °C/W	VITO-220AB

Note : 1.Mounted on P.C.B with copper pad size 20mm x 30mm, thickness 1.5mm

2.Reverse Surge 2.0A @ 0.004ms, 10 cycle

3.Repetitive Peak Reverse Current (IRRM) 0.5A @ Per Leg at tp =  $2\mu$ s, 1kHz

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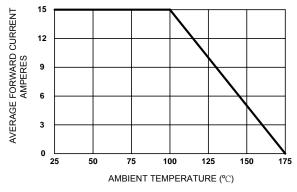


Figure 1. Forward Current Derating Curve

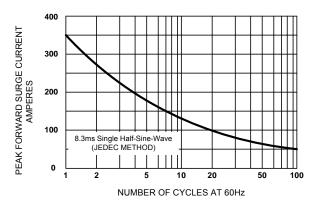
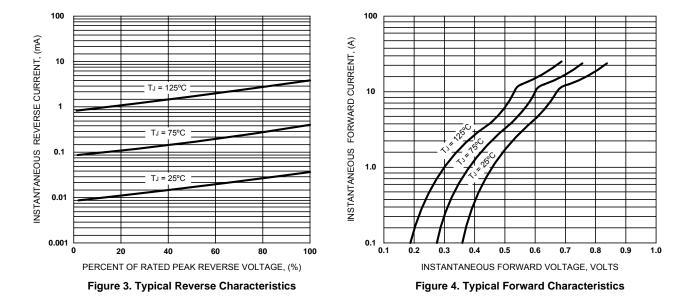


Figure 2. Maximum Non-repetitive Surge Current



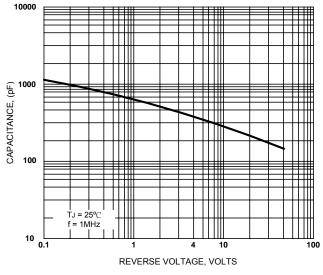
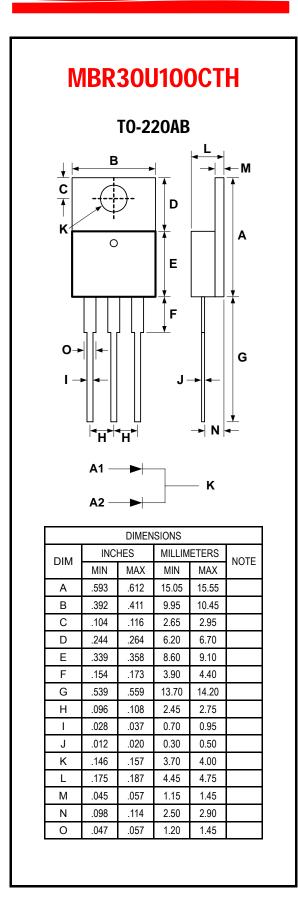
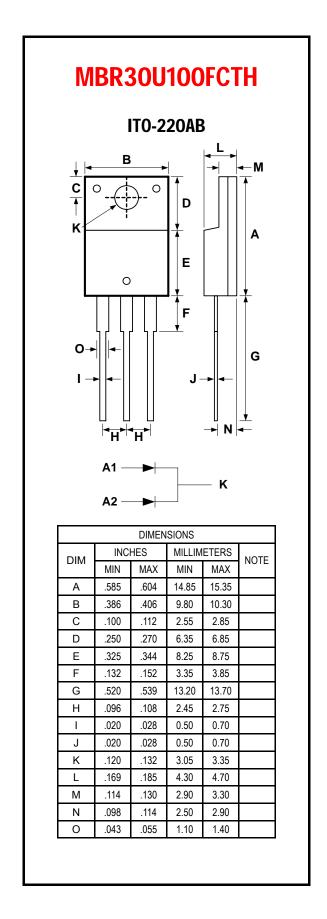
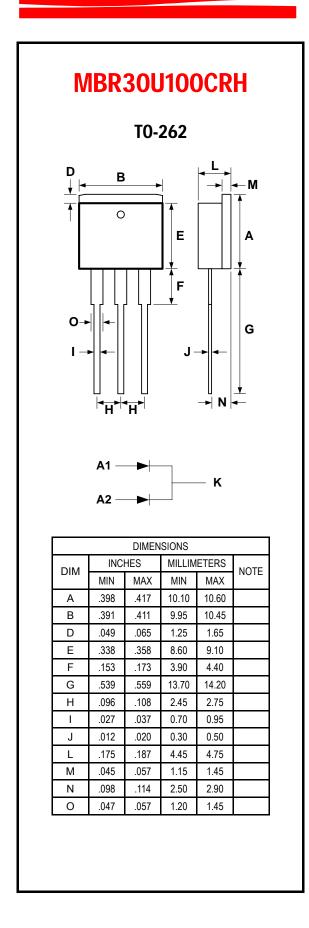


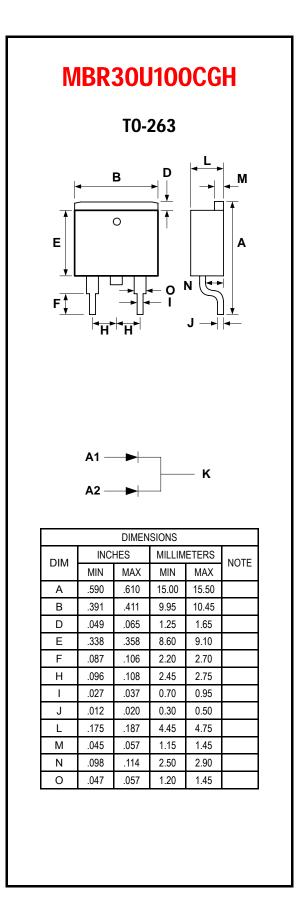
Figure 5. Typical Junction Capacitance





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