



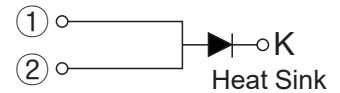
MBR645TC

Schottky Barrier Diode

Features

- High Surge Capability
- High Current Capability
- Low Forward Voltage Drop
- Low power loss, high efficiency

TO-263



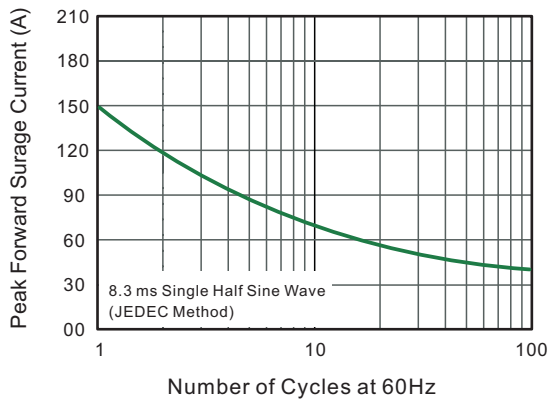
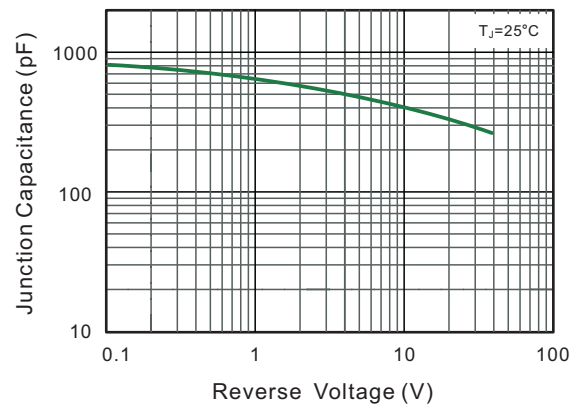
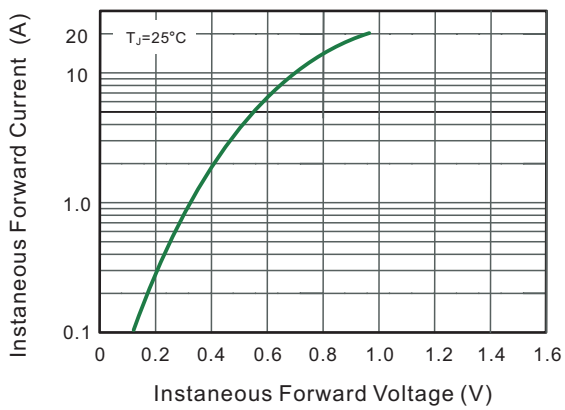
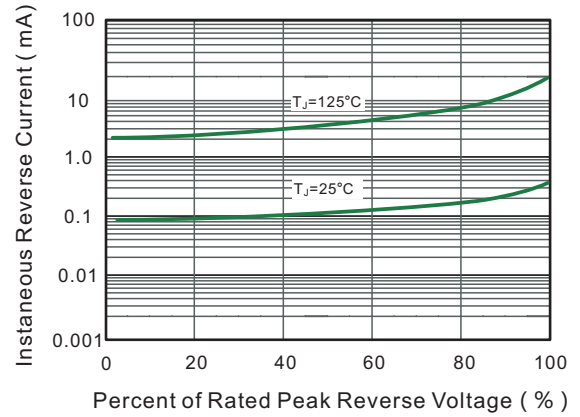
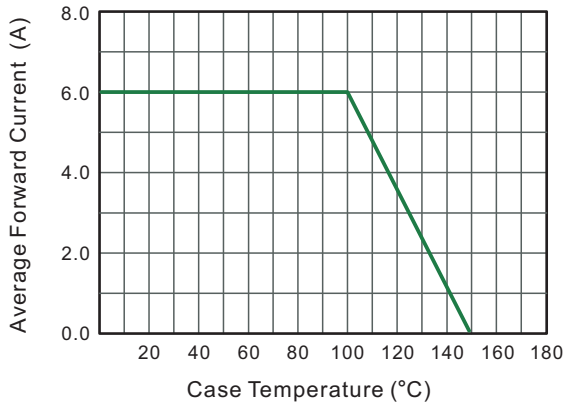
Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	MBR645TC	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	45	V
Maximum RMS Voltage	V_{RMS}	32	V
Maximum DC Blocking Voltage	V_{DC}	45	V
Maximum Average Rectified Output Current at $T_C=25\text{ }^\circ\text{C}$	$I_{F(AV)}$	6	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	150	A
Maximum Instantaneous Forward Voltage at $I_F=6\text{ A}$, $T_J=25\text{ }^\circ\text{C}$ at $I_F=6\text{ A}$, $T_J=125\text{ }^\circ\text{C}$	V_F	0.6 --	V
Reverse Current at $V_R=45\text{ V}$, $T_J=25\text{ }^\circ\text{C}$ at $V_R=45\text{ V}$, $T_J=125\text{ }^\circ\text{C}$	I_R	0.8 7	mA
Typical Junction Capacitance at $f=1\text{MHz}$, 4V DC	C_j	600	pF
Typical Thermal Resistance	$R_{\theta JC}$	3	$^\circ\text{C/W}$
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ\text{C}$



Typical Characteristic Curves



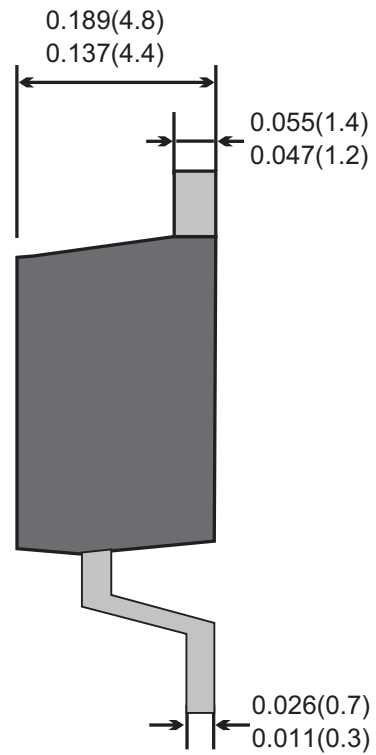
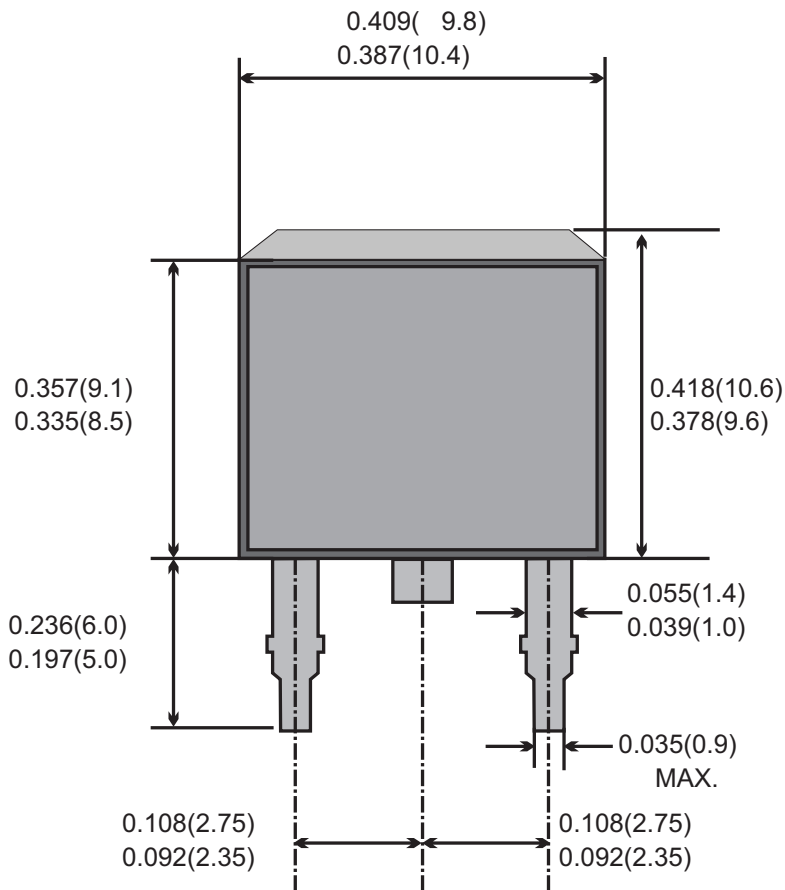


MBR645TC Schottky Barrier Diode

Package Outline

TO-263

Dimensions in mm



Unit:inch(mm)