SIRECT
ELECTRONIC

MBR140 ~ MBR1200

Power Schottky Rectifier - 1Amp 40~200Volt

☐ Features

- -For surface mounted applications
- -Low profile package
- -Built-in strain relief
- -Metal silicon junction, majority carrier conduction
- -Low power loss, high efficiency
- -High current capability, low forward voltage drop
- -High temperature soldering guaranteed
- -High reliability
- -High surge current capability
- -Epitaxial construction
- -Lead free device
- -ESD sensitive product handling required

☐ Mechanical data

-Case : Molded plastic
-Epoxy : UL 94V-0 rate flame retardant
-Terminals : Solder plated, solderable per MIL-STD-750,method 2026
-Polarity : Color band denotes cathode end

☐ Maximum ratings and Electrical characteristics

Parameters		MBR140	MBR160	MBR1100	MBR1150	MBR1200	UNIT
Maximum Recurrent Peak Reverse Voltage		40	60	100	150	200	V
Maximum RMS Voltage		28	42	70	105	140	V
Maximum DC Blocking Voltage		40	60	100	150	200	V
Maximum Average Forward Rectified Current		1					A
Peak Forward Surge Current		30					A
Maximum Instantaneous Forward Voltage at 1A	Tc = 25°C	0.50	0.65	0.8	0.85	0.87	V
	Tc = 125°C	0.40	0.50	0.66	0.69	0.72	
Maximum Average Reverse Current at Rated DC Blocking Voltage	Tc = 25°C	0.5		0.05			mA
	Tc = 100°C	20		10			
Typical Junction Capacitance		110					pF
Typical Thermal Resistance RθJL		30					°C/W
Operating and Storage Temperature Range		-50 to +125		-50 to +150			°C

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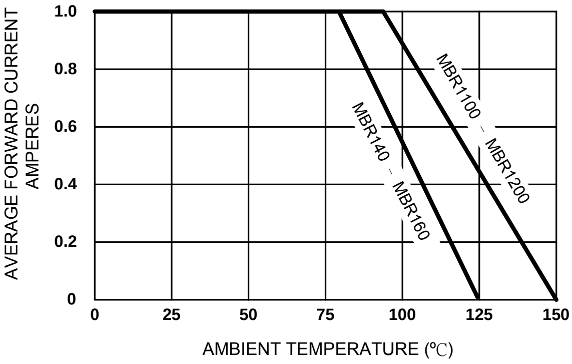

Figure 1. Forward Current Derating Curve

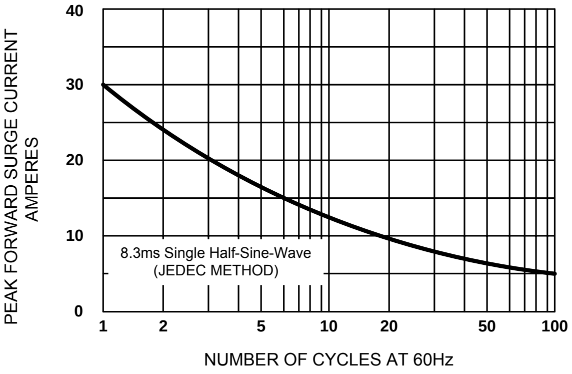

Figure 2. Maximum Non-repetitive Surge Current

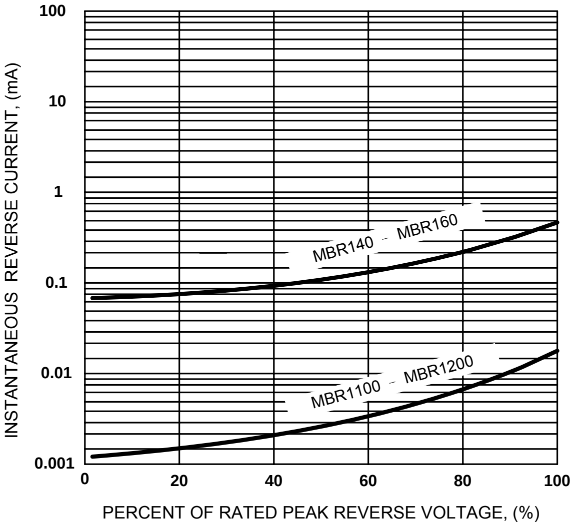

Figure 3. Typical Reverse Characteristics

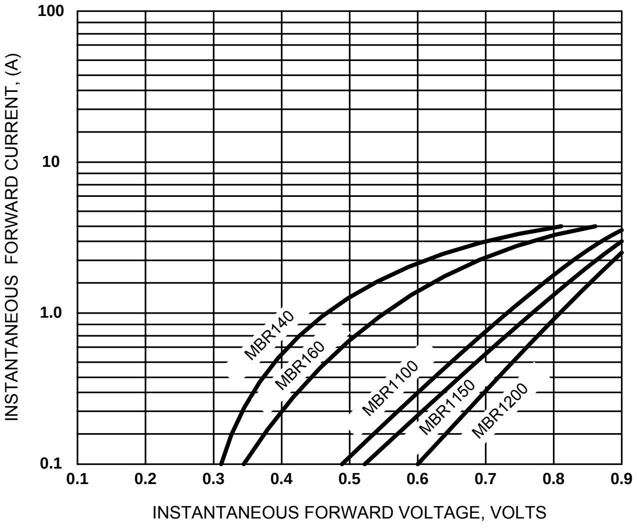

Figure 4. Typical Forward Characteristics

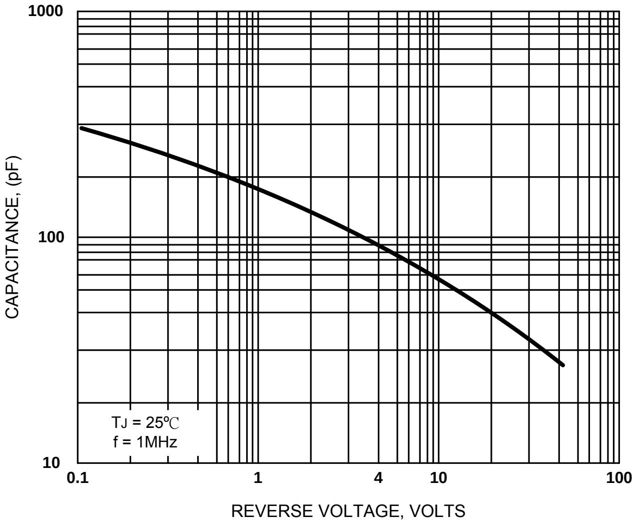

Figure 5. Typical Junction Capacitance

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