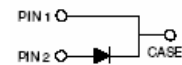
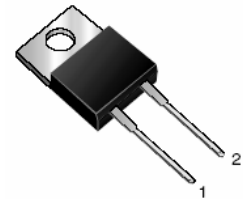


## 7.5A Schottky Barrier Rectifiers

### Features

- Plastic package has Underwriters Laboratory Flammability Classifications 94V-0
- Metal silicon junction, majority carrier conduction
- Lower power losses, high efficiency
- Guarding for over voltage protection
- Low forward voltage drop
- High forward surge capability
- High frequency operation
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- RoHS compliance



TO-220AC



### Mechanical Data

<b>Case:</b>	JEDEC TO-220AC, molded plastic body
<b>Terminals:</b>	Plated leads, solderable per MIL-STD-750, Method 2026
<b>Polarity</b>	As marked
<b>Mounting Position:</b>	Any
<b>Mounting Torque:</b>	10 in-lbs maximum
<b>Weight:</b>	0.08 ounce, 2.24 grams

### Maximum Ratings *(T<sub>Ambient</sub>=25°C unless noted otherwise)*

Symbol	Description	MBR735	MBR745	MBR750	MBR760	Unit	Conditions
<b>V<sub>RRM</sub></b>	Maximum Repetitive Peak Reverse Voltage	35	45	50	60	V	
<b>V<sub>RWM</sub></b>	Working Peak Reverse Voltage	35	45	50	60	V	
<b>V<sub>DC</sub></b>	Maximum DC Blocking Voltage	35	45	50	60	V	
<b>I<sub>F(AV)</sub></b>	Maximum Average Forward Rectified Current	7.5				A	See Fig.1
<b>I<sub>FSM</sub></b>	Peak Forward Surge Current	150				A	8.3ms single half sine-wave superimposed on rated load (JEDEC Method)
<b>T<sub>J</sub></b>	Operating Junction Temperature Range	-65 to +150				°C	
<b>T<sub>STG</sub></b>	Storage Temperature Range	-65 to +175				°C	

# 7.5A Schottky Barrier Rectifiers

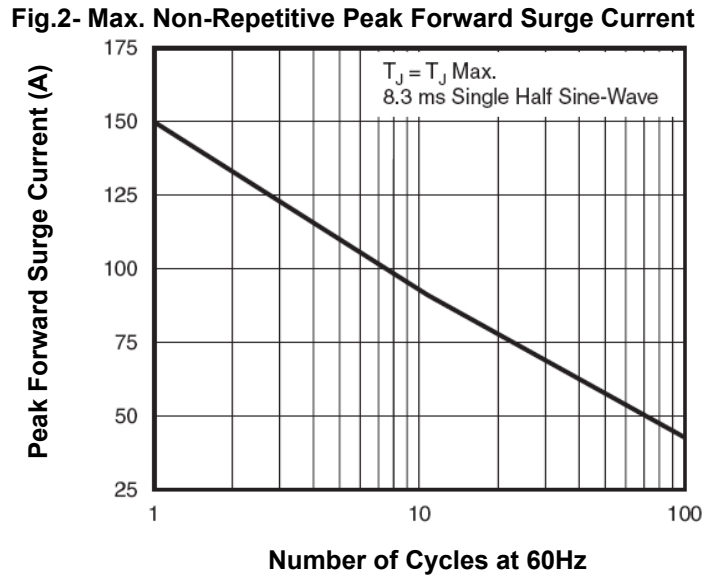
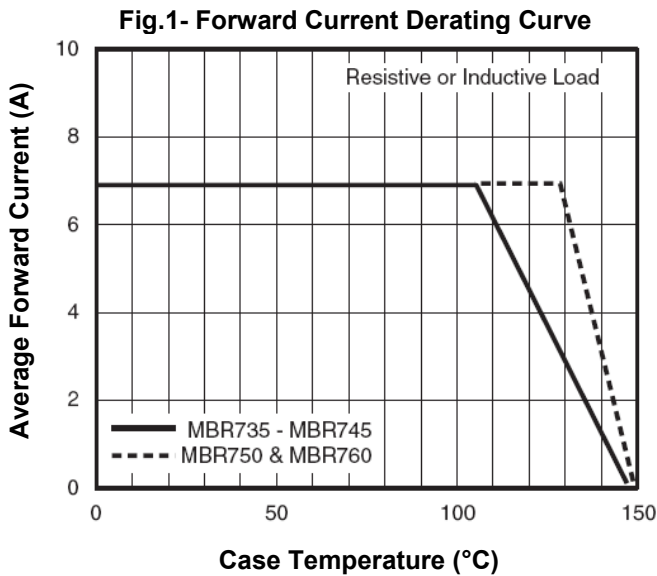
## MBR735 - MBR760

### Electrical Characteristics ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	MBR735	MBR745	MBR750	MBR760	Unit	Conditions
$V_F$	Maximum Instantaneous Forward Voltage (Note 1)	-	-	0.75		V	IF=7.5A, TC=25 °C
		0.57	-	0.65			IF=7.5A, TC=125 °C
		0.84	-	-			IF=15A, TC=25 °C
		0.72	-	-			IF=15A, TC=125 °C
$I_R$	Maximum Instantaneous Reverse Current at rated DC Blocking Voltage	0.1	-	0.5		mA	TC=25 °C
		15	-	50			TC=125°C
$R_{\theta-JC}$	Maximum Thermal Resistance from Junction to Case	3.0				°C/W	

**Note 1:** Pulse test: 300µs pulse width, 1% duty cycle.

### Typical Characteristics Curves



# 7.5A Schottky Barrier Rectifiers

## MBR735 - MBR760

Fig.3- Typical Instantaneous Forward Characteristics

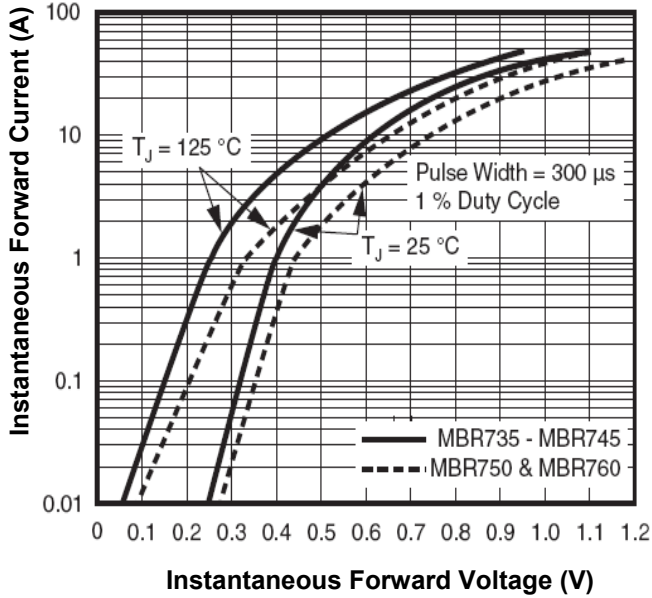


Fig.4- Typical Reverse Characteristics

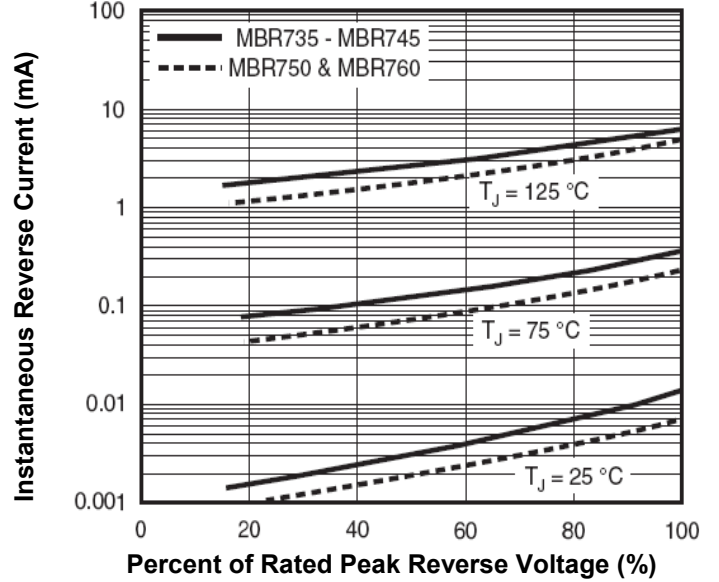
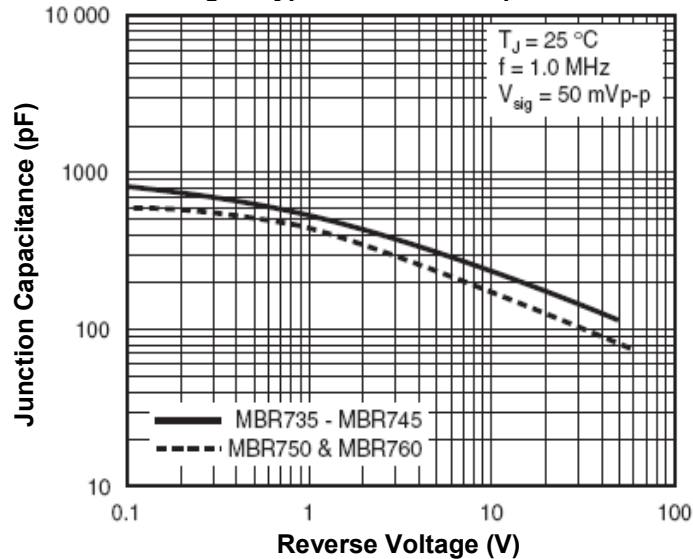


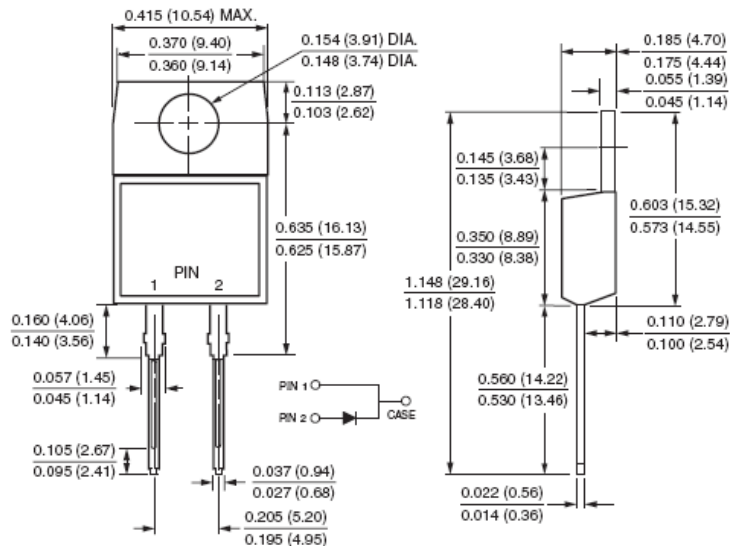
Fig.5- Typical Junction Capacitance



# 7.5A Schottky Barrier Rectifiers

## MBR735 - MBR760

### Dimensions in inches (mm)



TO-220AC

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