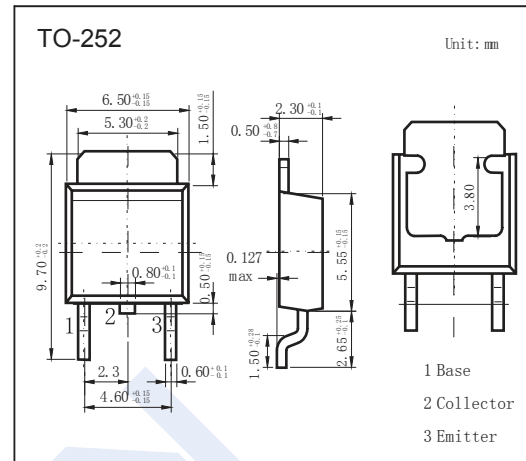


## Schottky Diodes

### MBR640CS~MBR6200CS

#### ■ Features

- Low power loss, high efficiency.
- Low forward voltage, high current capability
- High surge capacity.
- For use in low voltage, high frequency inverters.



#### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	MBR 640CS	MBR 645CS	MBR 650CS	MBR 660CS	MBR 680CS	MBR 690CS	MBR 6100CS	MBR 6150CS	MBR 6200CS	Unit	
Repetitive Peak Reverse Voltage	$V_{RRM}$	40	45	50	60	80	90	100	150	200	V	
Surge Peak Reverse Voltage	$V_{RSM}$	28	31.5	35	42	56	63	70	105	140		
Maximum DC Blocking Voltage	$V_{DC}$	40	45	50	60	80	90	100	150	200		
Forward Voltage @ $I_F=3A$	$V_F$	0.7		0.75		0.8		0.9				
Averaged Forward Current	$I_{FAV}$	6										A
Peak Forward Surge Current $T_A=25^\circ\text{C}$	$I_{FSM}$	75										
Maximum DC Reverse Current $T_a=25^\circ\text{C}$ $T_a=100^\circ\text{C}$	$I_R$	0.05										mA
		20										
Typical Thermal Resistance	$R_{thC}$	3										$^\circ\text{C}/\text{W}$
Junction Temperature	$T_J$	150			175							$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55 to 150					-65 to 175					

\* 1 Measured at 1 MHz and applied reverse voltage of 4 V D.C

\* 2 Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length, P.C.B. mounted

## Schottky Diodes

### MBR640CS~MBR6200CS

■ Typical Characteristics

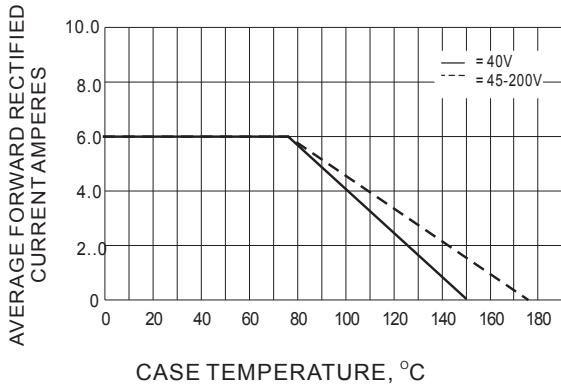


Fig.1- FORWARD CURRENT DERATING CURVE

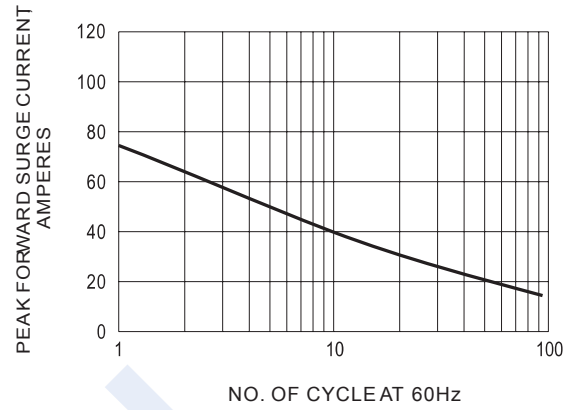


Fig.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

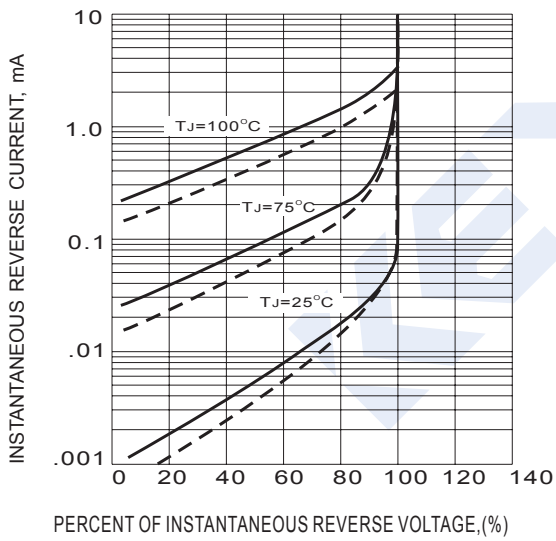


Fig.3- TYPICAL REVERSE CHARACTERISTIC

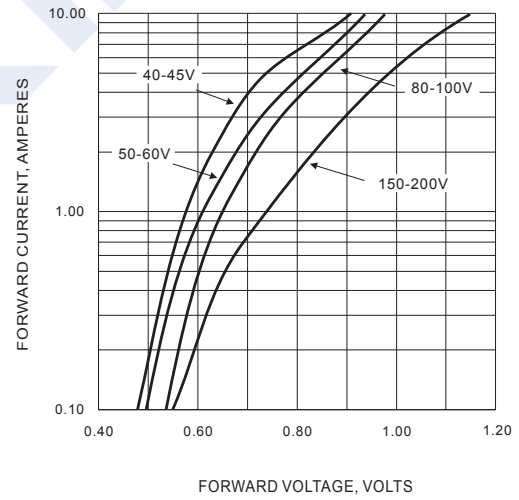


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC