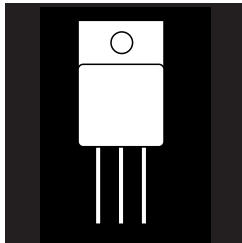


OM5257SA/RA/DA OM5259SA/RA/DA  
OM5258SA/RA/DA OM5260SA/RA/DA

# HERMETIC JEDEC TO-254AA HIGH EFFICIENCY, CENTER-TAP RECTIFIER



40 Amp, 50 To 200 Volts, 50 ns trr

## FEATURES

- Very Low Forward Voltage
- Very Fast Switching Time
- Hermetic Metal Package, JEDEC TO-254AA Outline
- Low Thermal Resistance
- Isolated Package
- High Surge
- Ceramic Feedthroughs Available
- Available Screened To MIL-S-19500, TX, TXV And S Levels

## DESCRIPTION

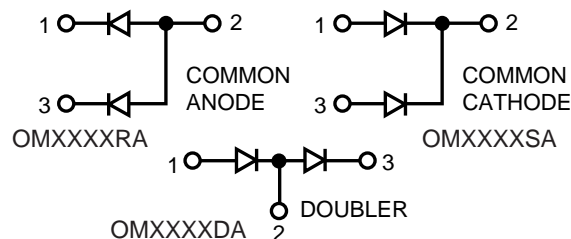
This series of products in a hermetic package is specifically designed for use at power switching frequencies in excess of 100 kHz. The series combines two high efficiency devices into one package, simplifying installation, reducing heat sink hardware, and the need to obtain matched components. These devices are ideally suited for Hi-Rel applications where small size and a hermetically sealed package are required. Common anode configurations are also available. Common cathode is standard.

## ABSOLUTE MAXIMUM RATINGS (Per Diode) @ 25°C

Peak Inverse Voltage.....	50 to 200 V
Maximum Average D.C. Output Current @ $T_c = 100^\circ \text{C}$ .....	20 A
Surge Current (Non-Repetitive 8.3 msec).....	500 A
Thermal Resistance Junction-to-Case.....	1.3°C/W
Operating and Storage Temperature Range.....	- 55° C to + 150°C

3.2

## SCHEMATIC



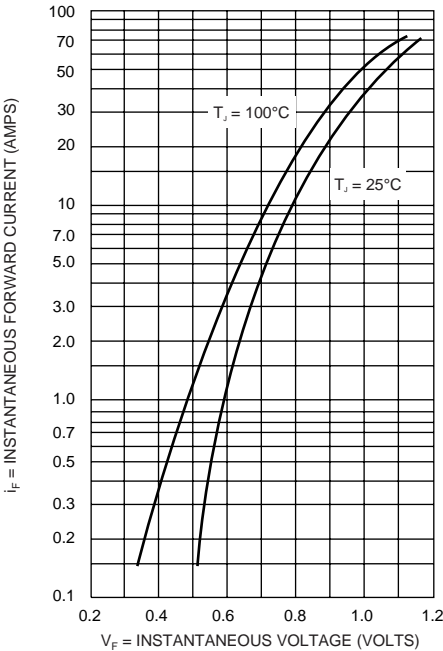
Common cathode is standard. Contact factory for performance characteristics for common anode and doubler.  
Standard Products are supplied with glass feedthroughs.  
For ceramic feedthroughs, add the letter "C" to the part number.  
Example - OMXXXXCQA.

ELECTRICAL CHARACTERISTICS (Per Diode)  $T_J = 25^{\circ}\text{C}$  unless otherwise specified

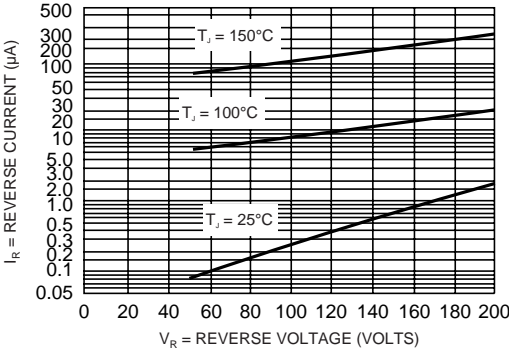
Part Number	PIV	Maximum Forward Voltage @ 15 A <sup>(1)</sup>		Maximum Reverse Current @ PIV		Maximum Reverse Recovery Time <sup>(2)</sup>
		$T_J = 25^{\circ}\text{C}$	$T_J = 100^{\circ}\text{C}$	$T_J = 25^{\circ}\text{C}$	$T_J = 100^{\circ}\text{C}$	
OM5257XX	50 V	1.1 V	1.0 V	20 $\mu\text{A}$	1.0 mA	50 nsec
OM5258XX	100 V					
OM5259XX	150 V					
OM5260XX	200 V					

Notes: (1) Pulse Test: Pulse Width = 300  $\mu\text{s}$ , Duty Cycle 2.0%. (2) Measured in Circuit:  $I_F = 0.5\text{ A}$ ,  $I_R = 1.0\text{ A}$ ,  $I_{\text{REC}} = 0.25\text{ A}$

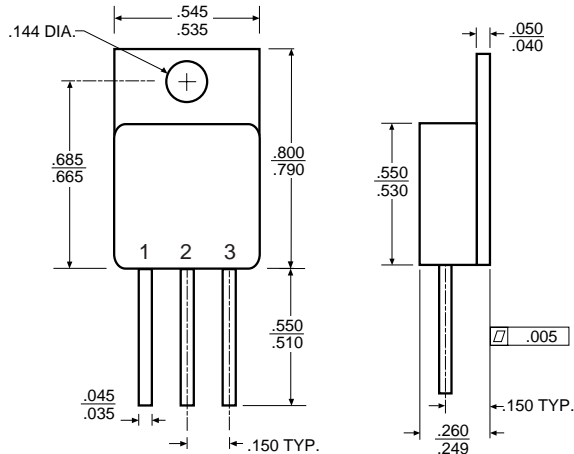
TYPICAL FORWARD VOLTAGE



TYPICAL REVERSE CURRENT



MECHANICAL OUTLINE



Z-Tab package also available.