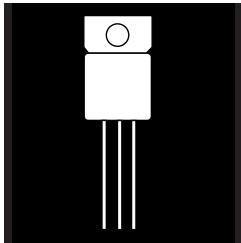


# HERMETIC JEDEC TO-257AA HIGH EFFICIENCY, SOFT RECOVERY CENTER-TAP RECTIFIER



**16 Amp, 400 & 600 Volts, 35 nsec trr**

## FEATURES

- Small Size
- Ultra Fast Recovery
- Soft Recovery Behavior
- Extremely Low Losses At High Switching Speeds
- Low  $I_{RM}$  Rating
- Hermetic And Isolated Package
- Available Screened To MIL-S-19500, TX, TXV, And S-Levels

## DESCRIPTION

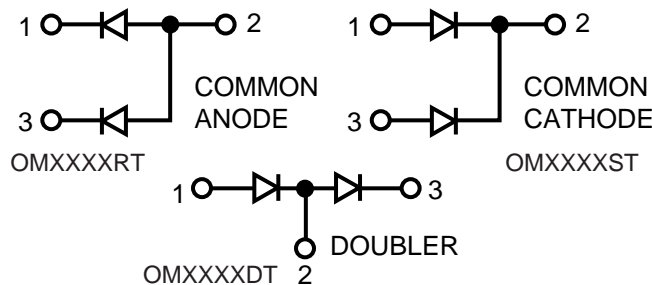
These soft recovery, high speed rectifiers are ideally suited for high performance in high voltage switching applications. The performance of these rectifiers minimize losses in power conversion and motor control circuits complementing the switching character of power MOSFETs, IGBTs, and bipolar transistors.

## ABSOLUTE MAXIMUM RATINGS (Per Leg) $T_C = 25^\circ\text{C}$

Peak Inverse Voltage .....	400 & 600 V
Maximum Average D.C. Output Current @ $T_C = 100^\circ\text{C}$ .....	8 A
Surge Current (Non-Repetitive 8.3 nsec) .....	95 A
Thermal Resistance, Junction-To-Case.....	3.1° C/W
Operating and Storage Temperature Range.....	-55°C to +150°C

3.2

## SCHEMATICS



Common cathode is standard. Contact factory for performance characteristics for common anode and doubler.  
Z-Tab package also available.

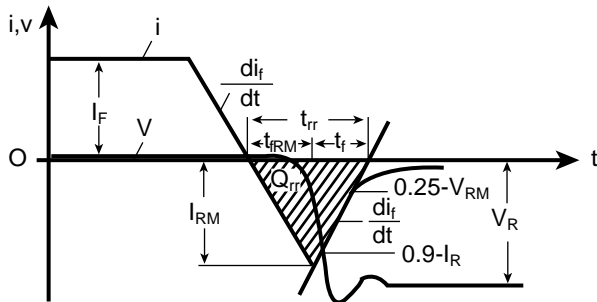
**ELECTRICAL CHARACTERISTICS (Per Leg)**

Type	PIV	Maximum Forward Voltage @ 8 A		Maximum Reverse Current @ .8x PIV		Maximum Reverse Recovery Time
		T <sub>J</sub> = 25° C	T <sub>J</sub> = 150° C	T <sub>J</sub> = 25° C	T <sub>J</sub> = 125° C	
OM5320XX	400	1.65 V	1.50 V	60 μA	1.5 mA	35
OM5321XX	600					

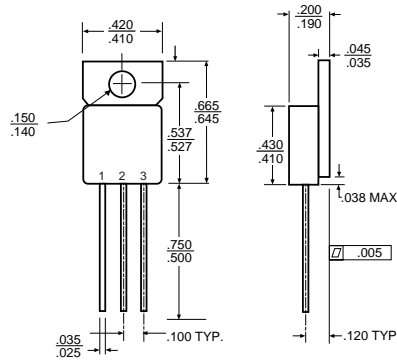
**TURN-OFF CHARACTERISTICS**

Symbols	Test Conditions	Min.	Typ.	Max.	Units
T <sub>rr</sub>	I <sub>F</sub> = 0.5 A; I <sub>R</sub> = 1 A; T <sub>J</sub> = 25° C I <sub>F</sub> = 1 A; di/dt = -15 A/μs; V <sub>R</sub> = 30 V; T <sub>J</sub> = 25° C	-	-	35	ns
I <sub>RM</sub>	V <sub>R</sub> = 350 V; I <sub>F</sub> = 8 A L = .05 μH; T <sub>J</sub> = 100° C; di <sub>F</sub> /dt = -64 A/μs	-	2.5	3.75	A

**DEFINITION OF TURN-OFF CHARACTERISTICS**

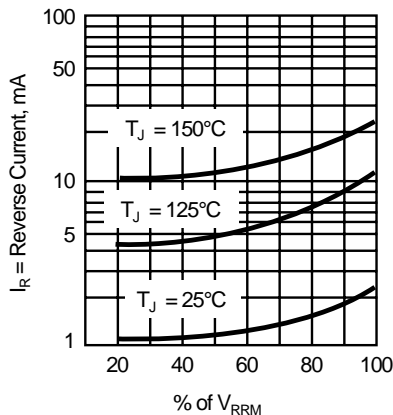


**MECHANICAL OUTLINE WITH PIN CONNECTION**



3.2

**TYPICAL REVERSE CURRENT**



**TYPICAL FORWARD VOLTAGE**

