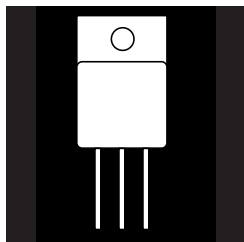


COM5221A COM5223A COM5225A
COM5222A COM5224A COM5226A

(COTS) COMMERCIAL OFF-THE-SHELF HIGH EFFICIENCY, CENTER-TAP RECTIFIER IN TO-254AA



24 Amp, 50 To 600 Volts, 35 To 50 nsec

FEATURES

- Low Forward Voltage
- Fast Switching Speed
- Hermetic Metal Package, JEDEC TO-254AA
- High Surge
- Small Size
- Isolated Package
- Standard Off-The-Shelf

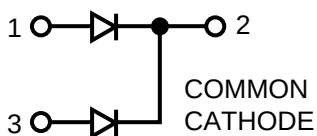
DESCRIPTION

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 is required.

ABSOLUTE MAXIMUM RATINGS (Per Diode) @ 25°C

Peak Inverse Voltage 50 to 600 V
Maximum Average D.C. Output Current @ $T_C = 100^\circ\text{C}$ 12 A
Non-Repetitive Sinusoidal Surge Current 8.3 ms 100 A
Operating and Storage Temperature Range -55°C to $+150^\circ\text{C}$

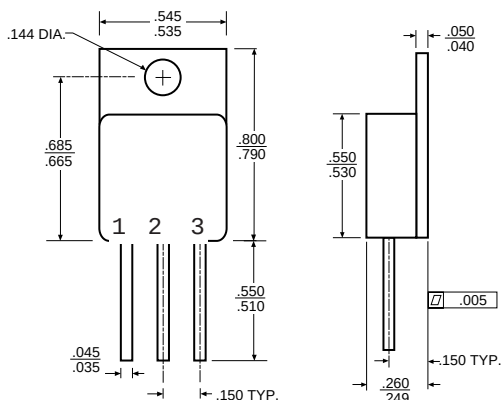
SCHEMATIC



Common cathode is standard. Contact the factory for performance characteristics for common anode and doubler.

Standard Products are supplied with glass feedthroughs.

MECHANICAL OUTLINE

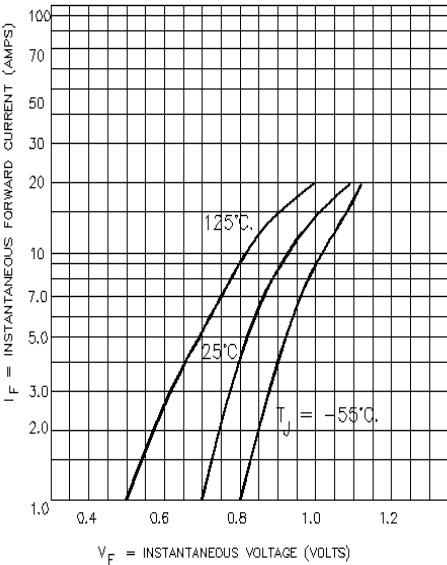


ELECTRICAL CHARACTERISTICS (Per Diode)

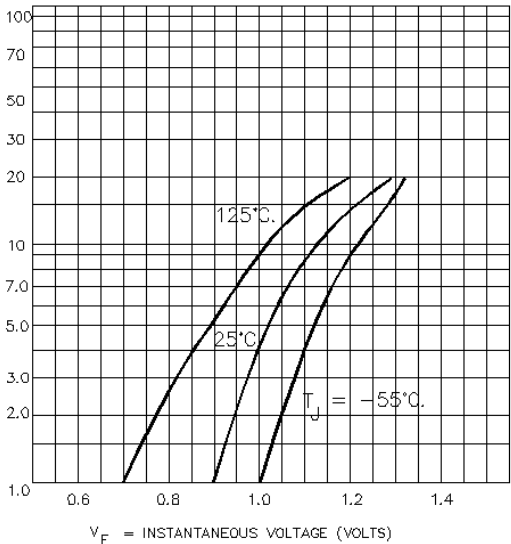
Type	PIV	Maximum Forward Voltage (Volts) @ (1)		Maximum Reverse Current @ PIV		Maximum Reverse Recovery Time (2)	Maximum Thermal Resist. R _{qJC}
		T _j = 25° C	T _j = 100° C	T _j = 25° C	T _j = 100° C		
COM5221A	50	1.2V @ 12A	1.1V @ 12A	20 µA	1.0 mA	35 nsec	2.0
COM5222A	100						
COM5223A	150						
COM5224A	200	1.6V @ 12A	1.4V @ 12A	20 µA	2.0 mA	50 nsec	2.0
COM5225A	400						
COM5226A	600						

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

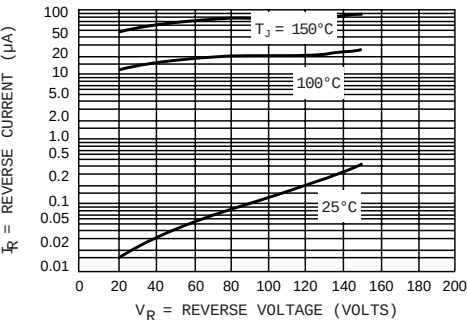
50 V TO 200 V
TYPICAL FORWARD VOLTAGE
COM5221, 5222, 5223, 5224



400 V TO 600 V
TYPICAL FORWARD VOLTAGE
COM5225, COM5226



TYPICAL REVERSE CURRENT
COM5221, 5222, 5223, 5224



TYPICAL REVERSE CURRENT
COM5225, COM5226

