

# GLASS PASSIVATED SUPER FAST RECTIFIERS

## PRODUCT SUMMARY

## Reverse Voltage 50 to 600 Volts

Foward Current 8.0 Amperes



## FEATURES

## Glass passivated chip

## Superfast switching time for high efficiency

Low reverse leakage current

High surge capacity

## MECHANICAL DATA

Case: TO-220AC full molded plastic package

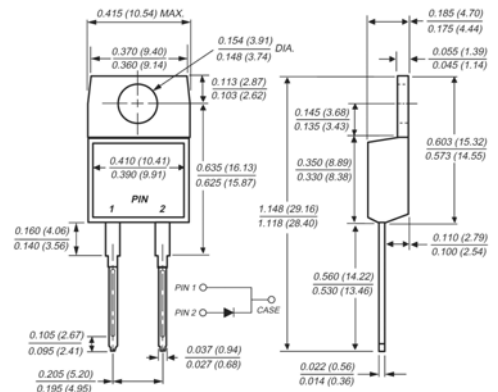
Terminals: Lead solderable per MIL-STD-202, Method 208

Polarity: As marked

Standard packaging: Any

Weight: 0.08 ounces, 2.24 grams

**TO-220AC**



**Pb-free; RoHS-compliant**

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	MUR805	MUR810	MUR820	MUR840	MUR860	Unit
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	Volts
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	Volts
Maximum average forward rectified current at T <sub>c</sub> =100°C	I <sub>F(AV)</sub>	8.0					Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	125.0					Amps
Maximum instantaneous forward voltage at 8.0A	V <sub>F</sub>	1.0			1.3	1.8	Volts
Maximum DC reverse current @T <sub>j</sub> =25°C at rated DC blocking voltage @T <sub>j</sub> =125°C	I <sub>R</sub>	10.0 500					uA
Maximum reverse recovery time at I <sub>L</sub> =0.5A, I <sub>C</sub> =1.0A, I <sub>F</sub> =0.25A	t <sub>rr</sub>	50					nS
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150					°C

**Notes:** 1. Pulse test: Pulse width 300 usec. Duty ccle 2%

## RATINGS AND CHARACTERISTIC CURVES

( $T_A = 25^\circ\text{C}$  unless otherwise noted)

Figure 1  
Typical Forward Characteristics

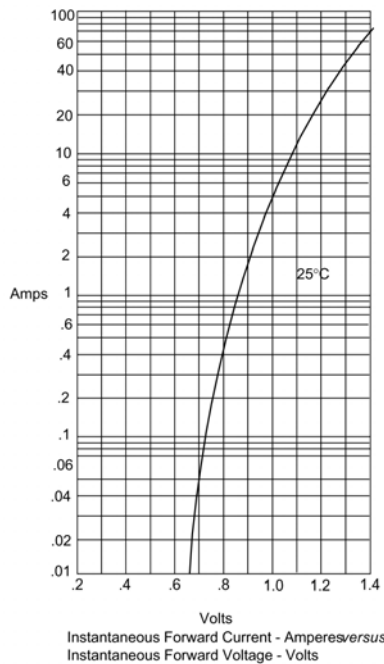


Figure 2  
Typical Reverse Characteristics

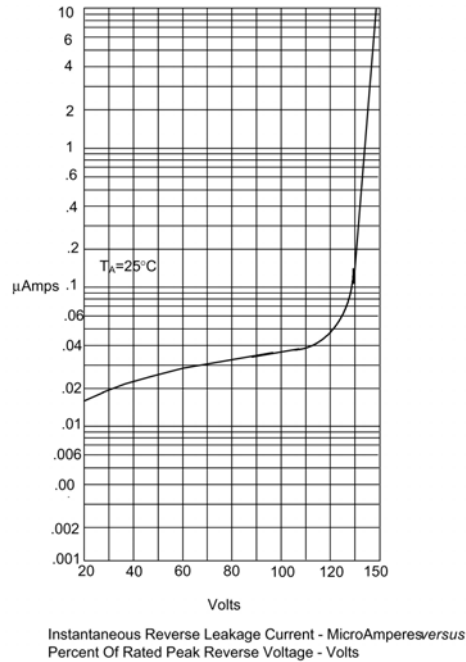


Figure 3  
Forward Derating Curve

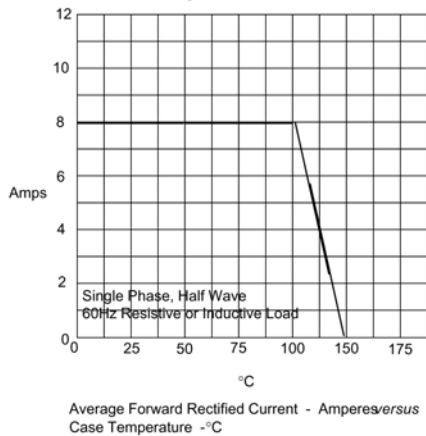
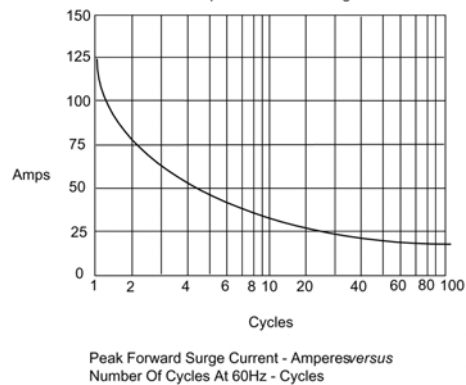


Figure 4  
Maximum Non-Repetitive Forward Surge Current



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