

GLASS PASSIVATED SUPER FAST RECTIFIERS

PRODUCT SUMMARY

Reverse Voltage 50 to 600 Volts
Forward Current 8.0 Amperes



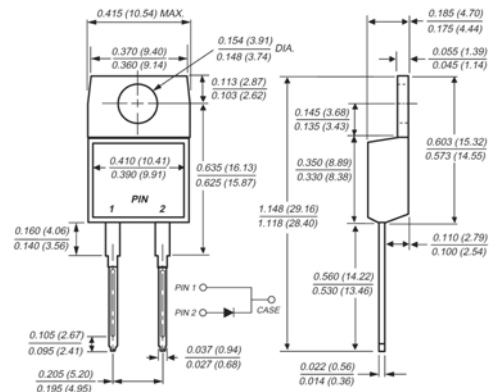
FEATURES

- 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_{RRM}	50	100	200	400	600	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	Volts
Maximum average forward rectified current at $T_C=100^\circ\text{C}$	$I_{F(AV)}$	8.0					Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	125.0					Amps
Maximum instantaneous forward voltage at 8.0A	V_F	1.0		1.3		1.8	Volts
Maximum DC reverse current at rated DC blocking voltage @ $T_j=25^\circ\text{C}$ @ $T_j=125^\circ\text{C}$	I_R	10.0			500		μA
Maximum reverse recovery time at $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{tr}=0.25\text{A}$	t_{rr}	50					nS
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150					$^\circ\text{C}$

Notes: 1. Pulse test: Pulse width 300 usec, Duty cycle 2%

RATINGS AND CHARACTERISTIC CURVES

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

Figure 1
Typical Forward Characteristics

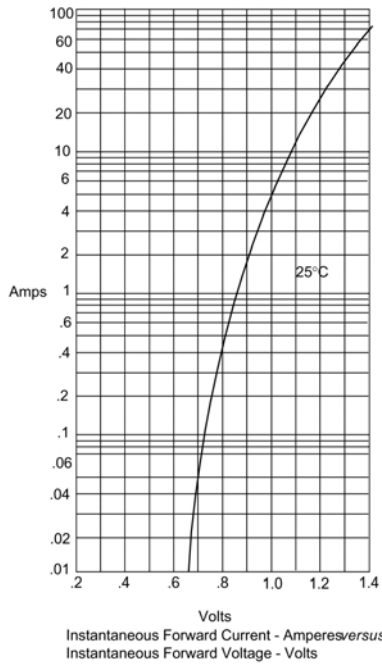


Figure 2
Typical Reverse Characteristics

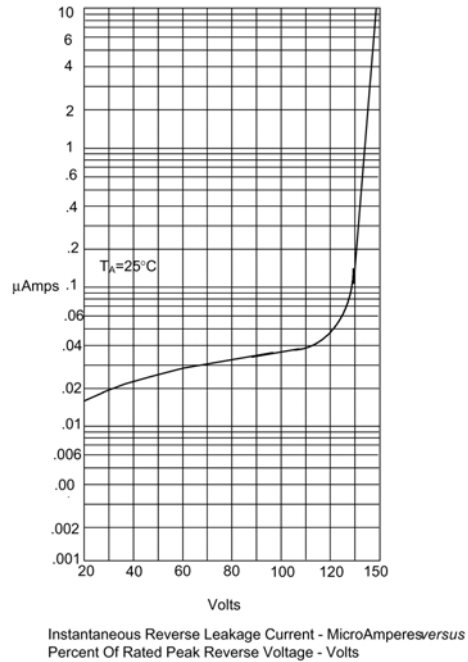


Figure 3
Forward Derating Curve

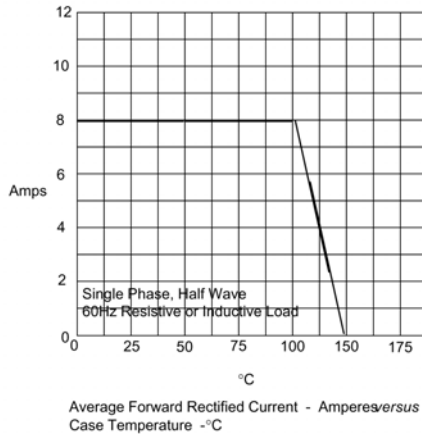
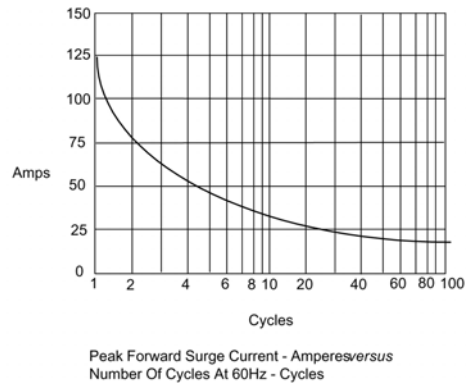


Figure 4
Maximum Non-Repetitive Forward Surge Current



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