

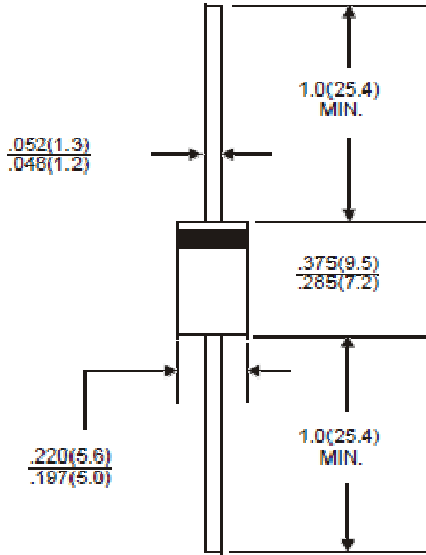


# MUR405 THRU MUR4100

## HIGH EFFICIENCY GLASS PASSIVATED RECTIFIER

Reverse Voltage - 50 to 1000 Volts Forward Current - 4.0 Ampere

### DO-201AD



Dimensions in inches and (millimeters)

### FEATURES

- ◆ Low power loss, high efficiency
- ◆ Low leakage
- ◆ Low forward voltage drop
- ◆ High current capability
- ◆ High speed switching
- ◆ High current surge
- ◆ High reliability
- ◆ Pb free product : 99% Sn above can meet RoHS environment substance directive request

### MECHANICAL DATA

**Case:** JEDEC DO-201AD, Molded plastic

**Terminals:** Solderable per MIL-STD-750 Method 2026

**Epoxy:** UL94V-0 rate flame retardant

**Approx. Weight:** 1.1 gram (approximately)

**Mounting Position:** Any

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

PARAMETER	SYMBOLS	MUR 405	MUR 410	MUR 415	MUR 420	MUR 440	MUR 460	MUR 480	MUR 4100	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	150	200	400	600	800	1000	Volts
Maximum RMS voltage	$V_{RMS}$	35	70	105	140	280	420	560	700	Volts
Maximum DC blocking voltage	$V_{DC}$	50	100	150	200	400	600	800	1000	Volts
Average Rectified current at $T_A = 55^\circ\text{C}$	$I_{(AV)}$	4.0								Amp
Non-repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	125								Amps
Maximum Forward Voltage at $I_F = 4.0\text{A}$	$V_F$	0.875			1.28		1.85			Volts
Maximum DC reverse current at rated DC blocking voltage at $T_A = 25^\circ\text{C}$	$I_R$	5.0			10.0		25.0			$\mu\text{A}$
Maximum reverse recovery time (NOTE 1)	$t_{rr}$	25			50		75			nS
Maximum forward recovery Time (NOTE 2)	$t_{fr}$	25			50		75			nS
Operating Junction & Storage Temperature Range	$T_J, T_{STG}$	-65 to +150								$^\circ\text{C}$

**Note:** 1. Reverse recovery condition  $I_F = 0.5\text{A}, I_R = 1.0\text{A}, I_{rr} = 0.25\text{A}$

2. Forward recovery condition  $I_F = 1.0\text{A}, di/dt = 100\text{A/s}$ , Recovery to 1.0 V.



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## RATINGS AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT CHARACTERISTICS

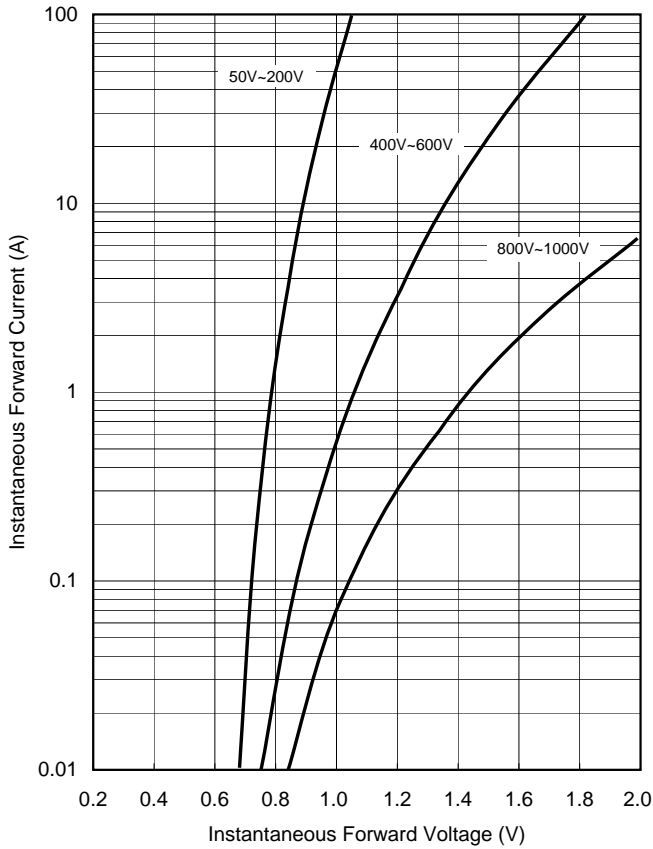


FIG. 2-Forward Derating Curve

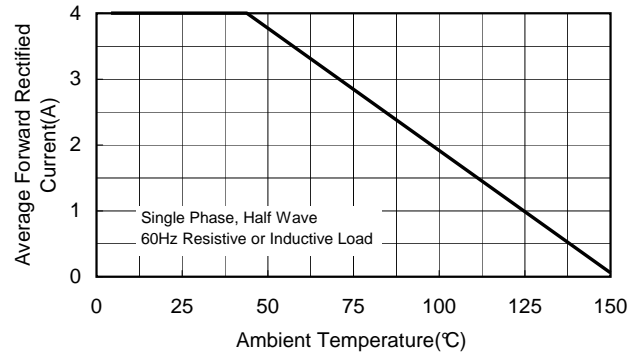


FIG. 4-Peak Forward Surge Current

