

## Ultra Fast Glass Passivated Rectifiers

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

### Features

- Low cost
- Ultra fast switching for high efficiency
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0

### Mechanical Data

- Case: JEDEC DO-201AE Molded plastic
- Polarity: Color band denotes cathode
- Mounting position: Any

Note: Products with logo  or  are made by HY Electronic (Cayman) Limited.

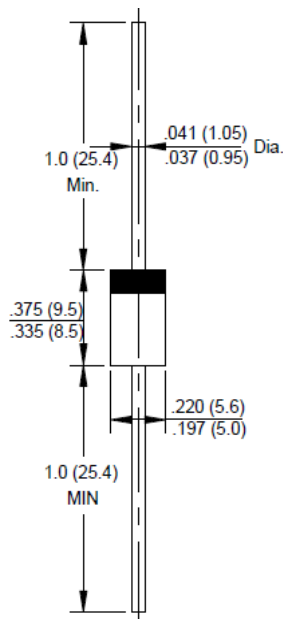
### Applications

- For use in SMPS, high frequency inverters, PWM and polarity protection applications

### DO-201AE



RoHS  
COMPLIANT



Package Outline Dimensions in Inches (Millimeters)

### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	MUR	MUR	MUR	MUR	MUR	MUR	MUR	MUR	Unit
		405EG	410EG	415EG	420EG	440EG	460EG	480EG	4100EG	
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	150	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	105	140	280	420	550	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	150	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T <sub>A</sub> =55 °C	I <sub>(AV)</sub>	4.0								A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	150								A
Peak Forward Voltage at 4.0 A DC	V <sub>F</sub>	1		1.28			1.85			V
Maximum DC Reverse Current at Rated @T <sub>J</sub> =25°C	I <sub>R</sub>	10								µA
DC Blocking Voltage @T <sub>J</sub> =100°C		150								
Maximum Reverse Recovery Time (Note 1)	T <sub>RR</sub>	45			50		75			nS
Operating Junction Temperature Range	T <sub>J</sub>	-55 to + 150								°C
Storage Temperature Range	T <sub>STG</sub>	-55 to + 150								°C

Notes: 1. Measured with I<sub>F</sub>=0.5A, I<sub>R</sub>=1A, I<sub>RR</sub>=0.25A.

2. The typical data above is for reference only.

# Rating and Characteristic Curves

## MUR405EG THRU MUR4100EG



Fig. 1 - Forward Current Derating Curve

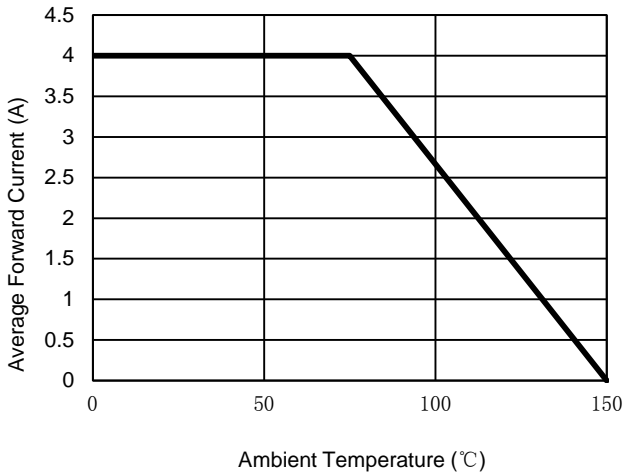


Fig. 2 - Maximum Non-Repetitive Surge Current

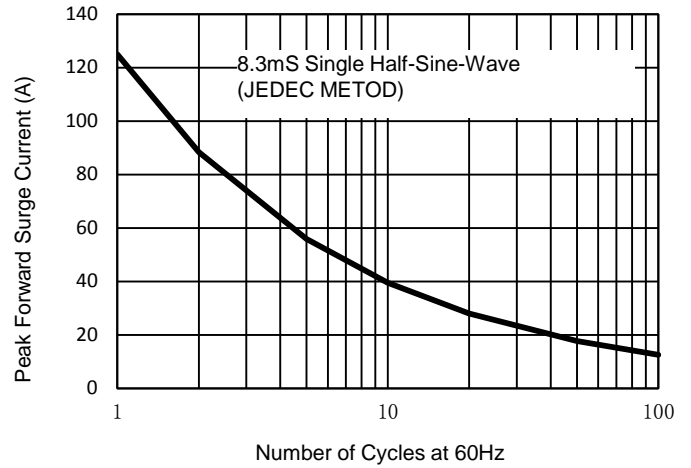


Fig. 3 - Typical Junction Capacitance

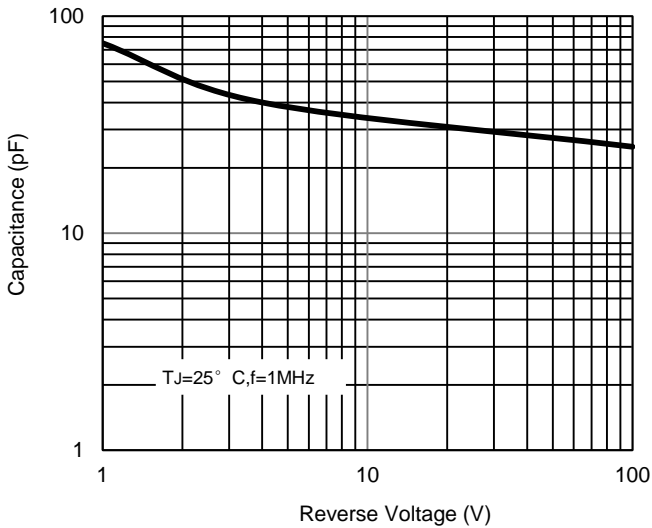


Fig. 4 - Typical Forward Characteristics

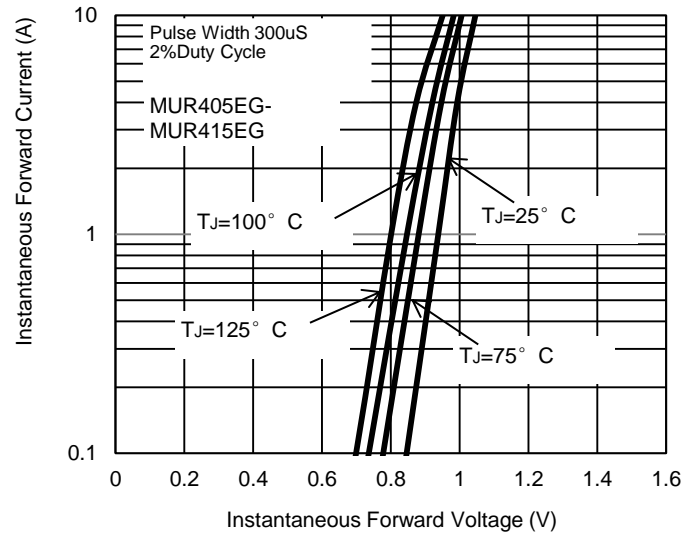


Fig. 5 - Typical Forward Characteristics

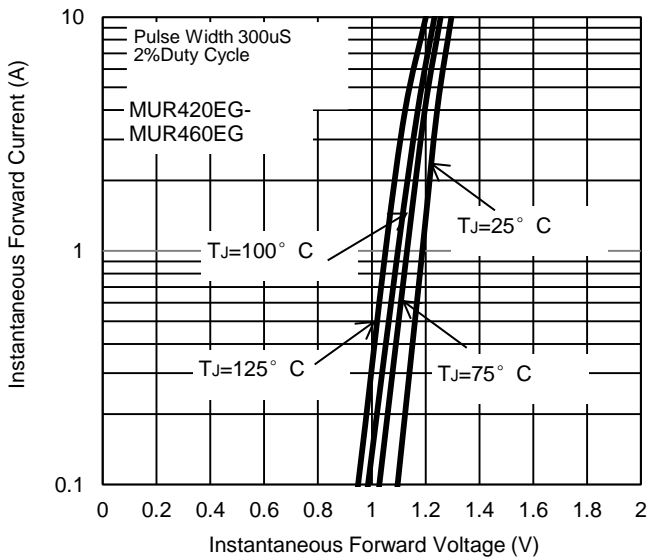
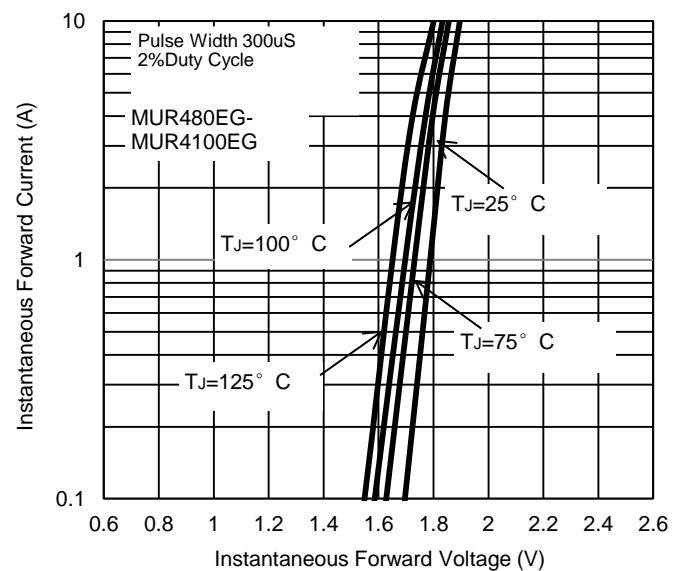


Fig. 6 - Typical Forward Characteristics



The curve above is for reference only.



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