

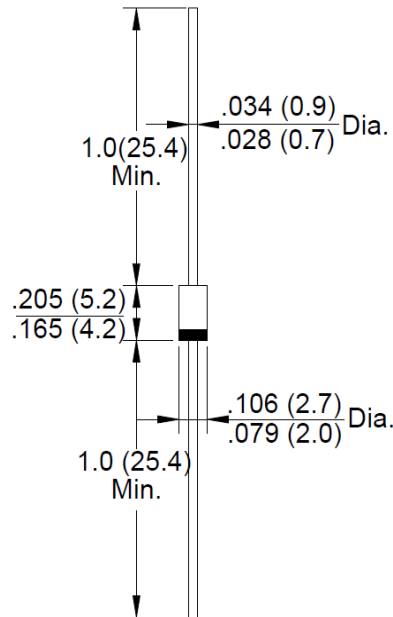
**High Voltage Glass Passivated Rectifiers****Reverse Voltage 1600 - 2000 Volts  
Forward Current - 1.0 Amperes****Features**

- Molded case feature for auto insertion
- High current capability
- Low leakage current
- High surge capability
- High temperature soldering guaranteed:  
250°C/10sec/0.375" (9.5mm) lead length  
at 5 lbs tension

**Mechanical Data**

- Terminal: Plated axial leads solderable per  
MIL -STD 202E, method 208C
- Case: Molded with UL-94 Class V-O  
recognized flame retardant epoxy.
- Polarity: Color band denotes cathode
- Weight: 0.012 ounces , 0.34 grams
- Mounting position: Any

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

**DO-41****RoHS  
COMPLIANT**

Dimensions in inches and (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	EM513G	EM516G	EM518G	Unit
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	1600	1800	2000	V
Maximum RMS Voltage	V <sub>RMS</sub>	1120	1260	1400	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	1600	1800	2000	V
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Lengths at T <sub>A</sub> =75°C	I <sub>(AV)</sub>	1.0			A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load	I <sub>FSM</sub>	30			A
Maximum Instantaneous Forward Voltage at Rated Forward Current	V <sub>F</sub>	1.25	2		V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	5.0 50.0			uA
Typical junction Capacitance (Note 1)	C <sub>J</sub>	10			pF
Typical Thermal Resistance (Note 2)	R <sub>θJA</sub>	55			°C/W
Operating Temperature Range	T <sub>J</sub>	-50 to +150			°C
Storage Temperature Range	T <sub>STG</sub>	-50 to +150			°C

NOTE: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

2. Thermal Resistance from Junction of ambient at .375" (9.5mm) lead lengths. P.C. board mounted.

EM5\*G-A-00-00

Rev. 11, 18-May-2020



Fig. 1 - Forward Current Derating Curve

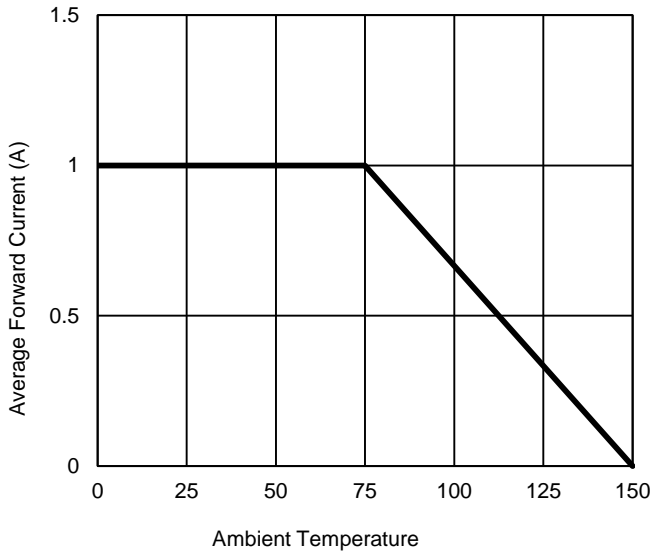


Fig. 2 - Maximum Non-Repetitive Surge Current

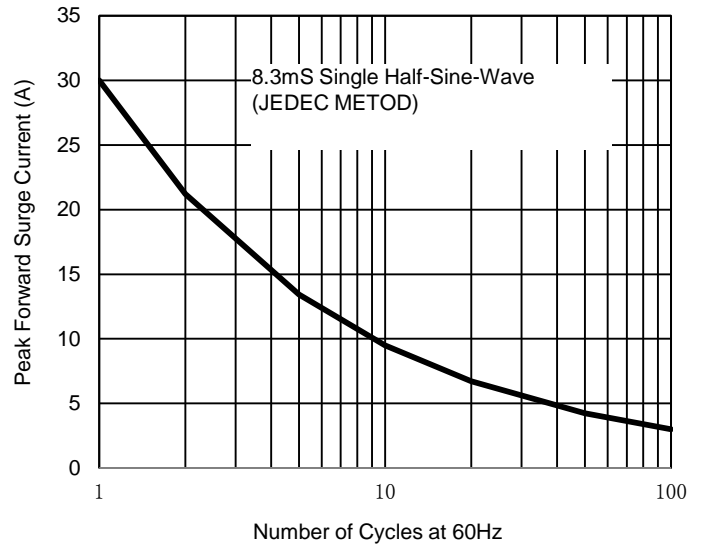


Fig. 3 - Typical Reverse Characteristics

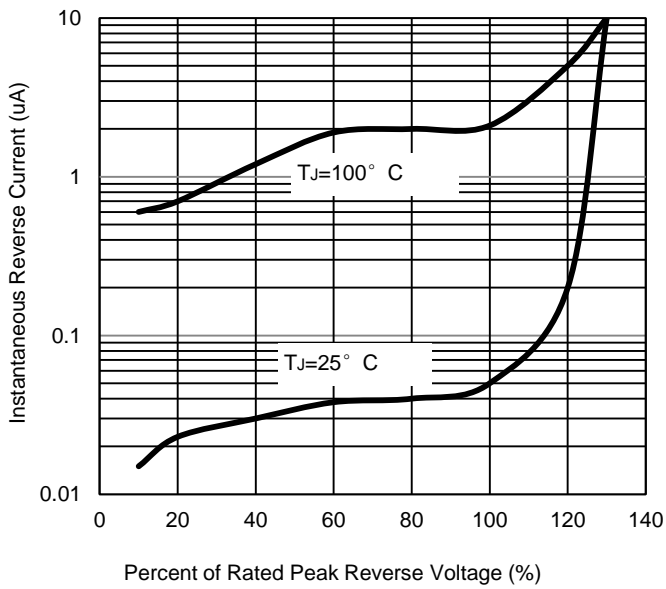


Fig. 4 - Typical Forward Characteristics

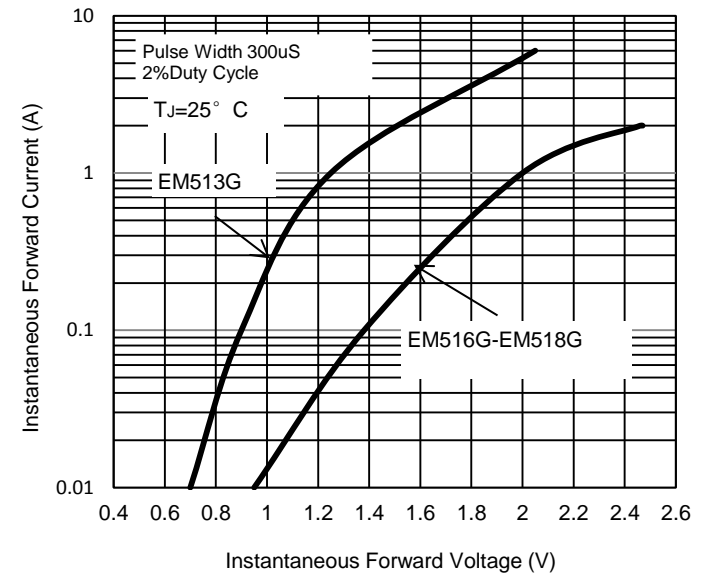
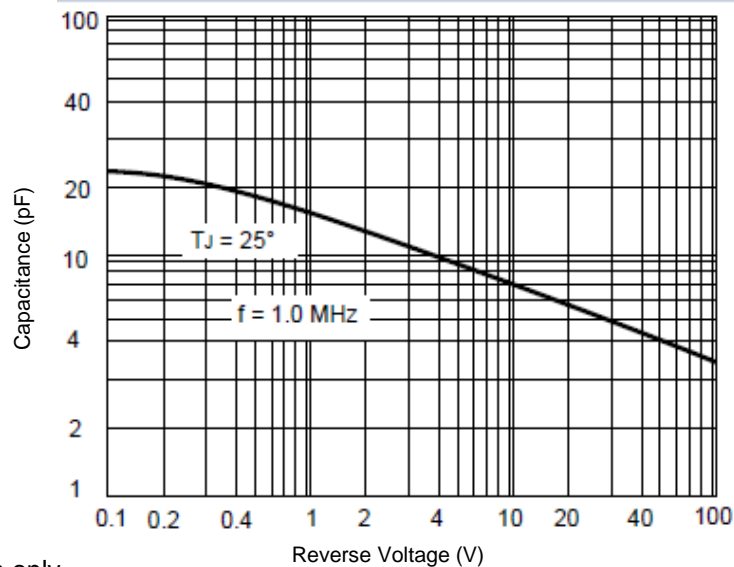


Fig. 5 - Typical Junction Capacitance



The curve above is for reference only.



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