

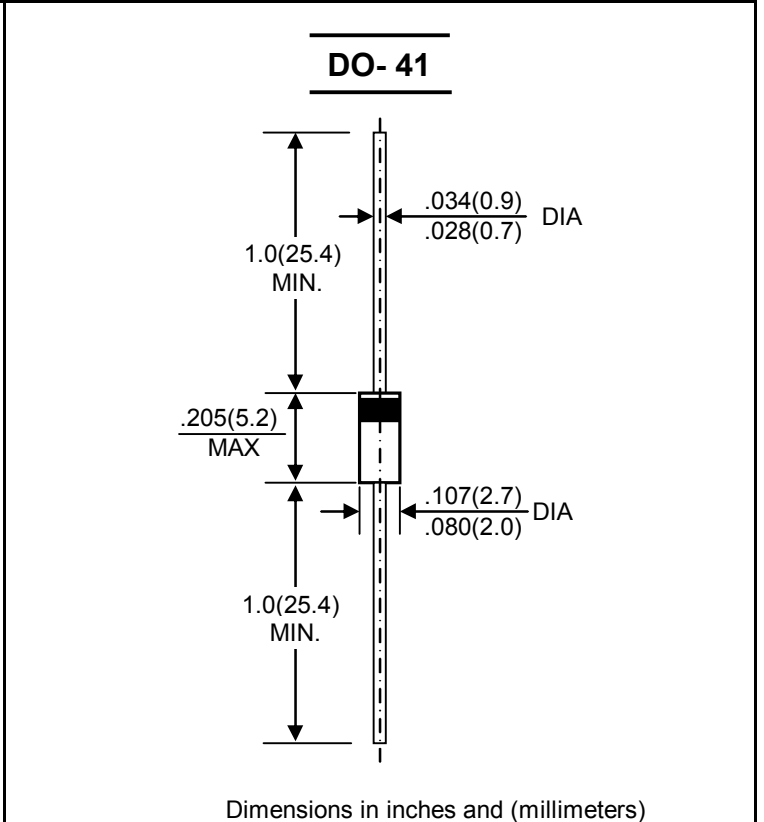
<b>HIGH VOLTAGE PLASTIC RECTIFIER</b>	<b>REVERSE VOLTAGE - 1600 to 2000 Volts</b> <b>FORWARD CURRENT - 1.0 Amperes</b>
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**FEATURES**

- 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



**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	EM513	EM516	EM518	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	1600	1800	2000	V
Maximum RMS Voltage	VRMS	1120	1260	1400	V
Maximum DC Blocking Voltage	VDC	1600	1800	2000	V
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Lengths at TA=75°C	I(AV)	1.0			A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load	IFSM	30			A
Maximum Instantaneous Forward Voltage at Rated Forward Current @ TA=25°C	VF	1.1			V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ TA=100°C	IR	5.0 50.0			μA
Typical junction Capacitance (Note 1 )	CJ	10			pF
Typical Thermal Resistance (Note 2)	RθJA	50			°C/W
Operating Temperature Range	TJ	-50 to +150			°C
Storage Temperature Range	TSTG	-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.

FIG. 1 – FORWARD CURRENT DERATING CURVE

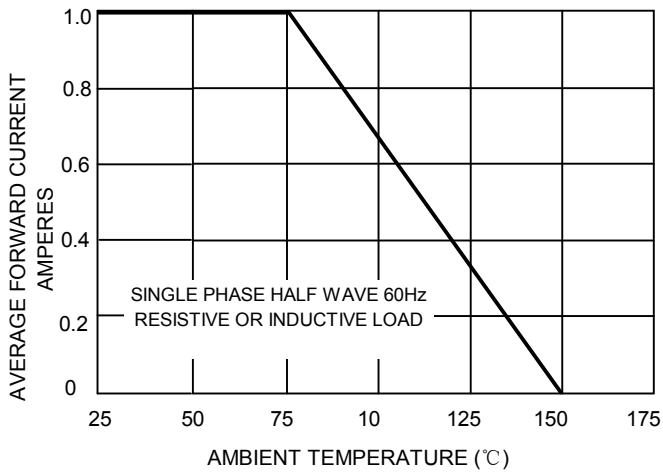


FIG.2-TYPICAL FORWARD CHARACTERISTICS

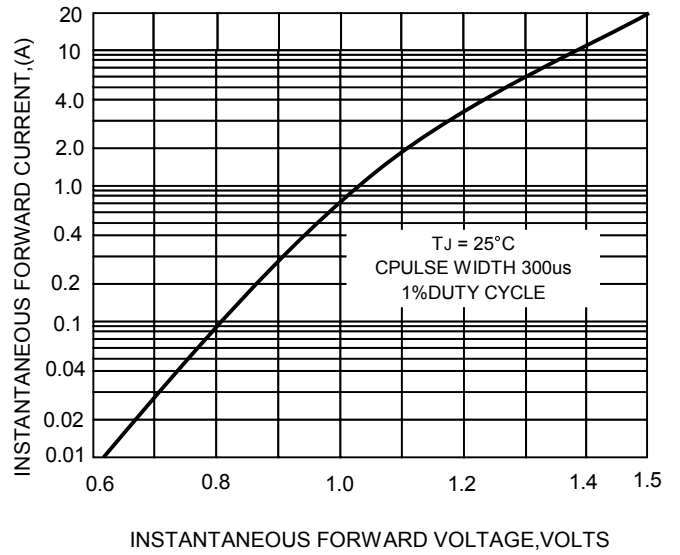


FIG. 3 – MAXIMUM NON-REPETITIVE SURGE CURRENT

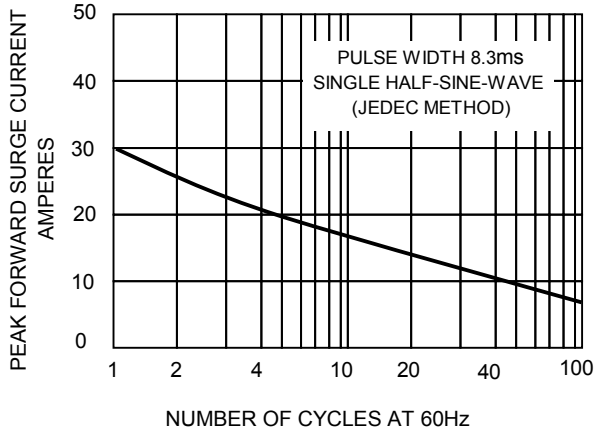


FIG.6-TYPICAL REVERSE CHARACTERISTICS

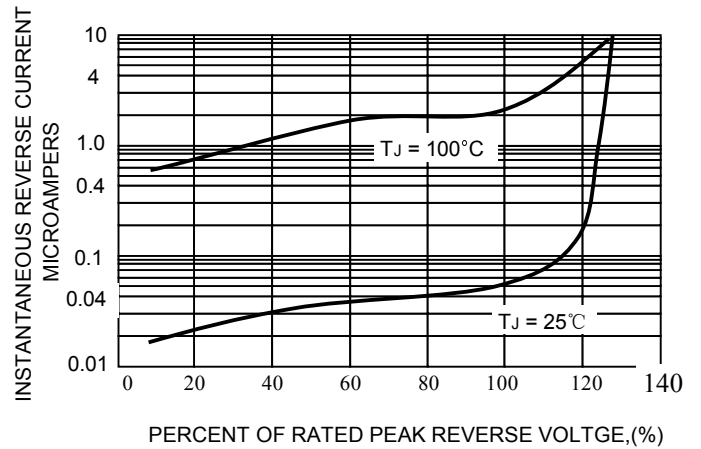


FIG.5 – TYPICAL JUNCTION CAPACITANCE

