

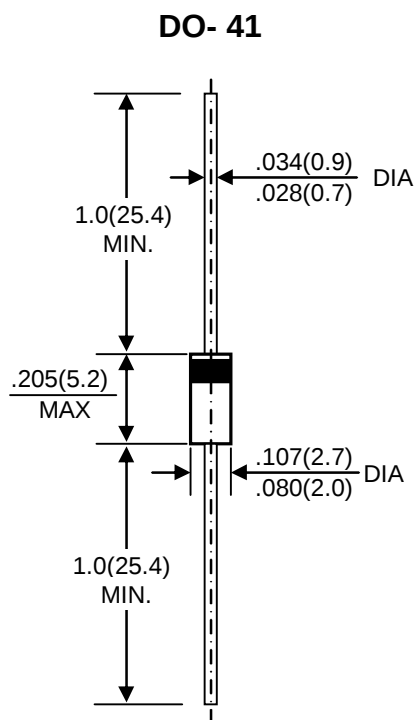
HIGH VOLTAGE PLASTIC RECTIFIER

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



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	EM513	EM516	EM518	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	1600	1800	2000	V
Maximum RMS Voltage	V _{RMS}	1120	1260	1400	V
Maximum DC Blocking Voltage	V _{DC}	1600	1800	2000	V
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Lengths at T _A =75°C	I _(AV)	1.0			A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load	I _{FSM}	30			A
Maximum Instantaneous Forward Voltage at Rated Forward Current @ T _A =25°C	V _F	1.1			V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ T _A =25°C @ T _A =100°C	I _R	5.0 50.0			uA
Typical junction Capacitance (Note1)	C _J	10			pF
Typical Thermal Resistance (Note 2)	R _{θJA}	50			°C/W
Operating Temperature Range	T _J	-50 to +175			°C
Storage Temperature Range	T _{STG}	-50 to +175			°C

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

2. Thermal Resistance from Junction of ambient at 0.375" (9.5mm) lead lengths. P.C. board mounted.

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FIG. 1 – FORWARD CURRENT DERATING CURVE

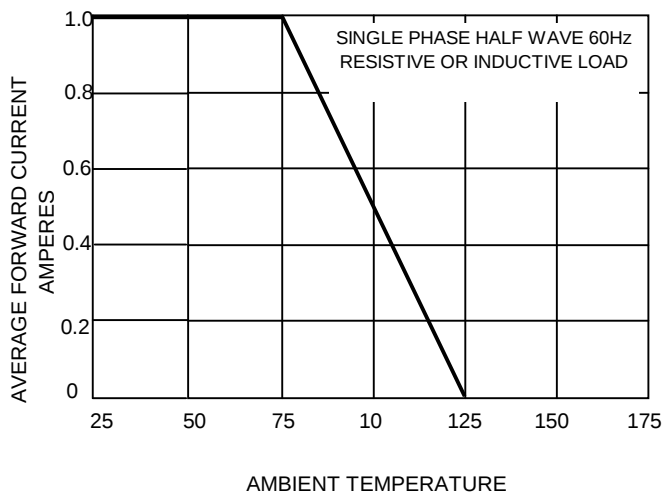


FIG.2-TYPICAL FORWARD CHARACTERISTICS

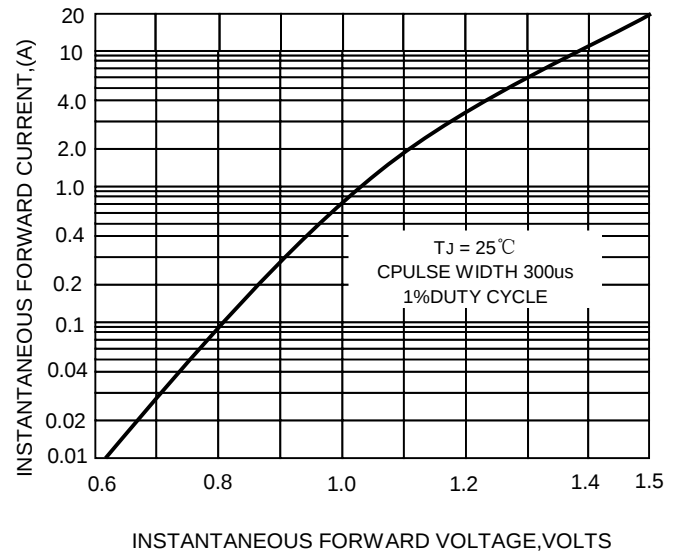


FIG. 3 – MAXIMUM NON-REPETITIVE SURGE CURRENT

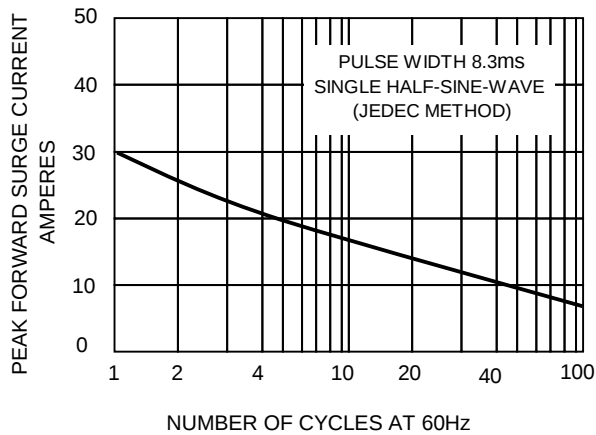


FIG.6-TYPICAL REVERSE CHARACTERISTICS

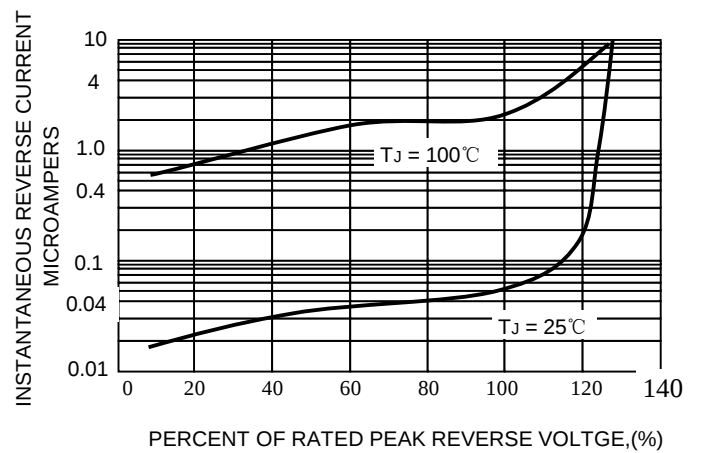


FIG.5 – TYPICAL JUNCTION CAPACITANCE

