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EM513 THRU EM518

1.0 Amp General Purpose Plastic Rectifier 1600 to 2000 Volts

DO-41

Features

- Halogen free available upon request by adding suffix "-HF"
- High reverse voltage
- Low reverse leakage
- High forward surge current capability.
- Lead Free Finish/RoHS Compliant (Note2) ("P" Suffix designates Compliant. See ordering information)
- Weight: 0.012 ounce, 0.33grams
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Temperature: -65°C to +150°C
- Storage Temperature: -65°C to +150°C

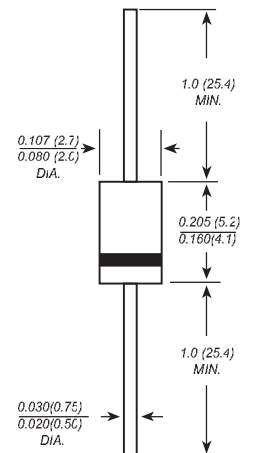
Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
EM513	1600V	1120V	1600V
EM516	1800V	1260V	1800V
EM518	2000V	1400V	2000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I_O	1.0A	.375" (9.5mm) Lead Length $T_A = 55^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage EM513~EM516 EM518	V_F	1.1V 1.2V	$I_{FM} = 1.0A$; $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5 μ A 50 μ A	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$
Typical Junction Capacitance	C_J	15pF	Measured at 1.0MHz, $V_R=4.0V$
Typical Thermal Resistance	R_{thja}	50°C/W	(Note 1)

Note 1: Thermal Resistance from Junction to Ambient at 0.375" (9.5mm) lead length, P.C. board mounted.

2: High Temperature Solder Exemption Applied, see EU Directive Annex 7.



Dimensions in inches and (millimeters)



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FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

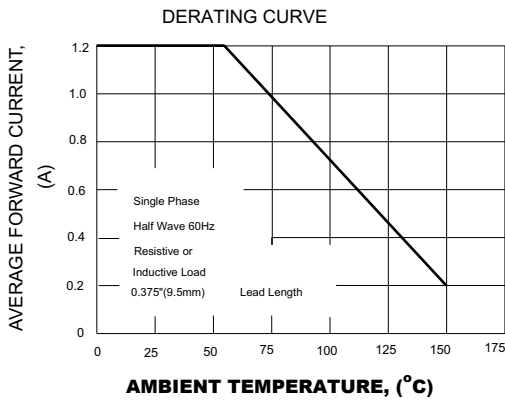


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

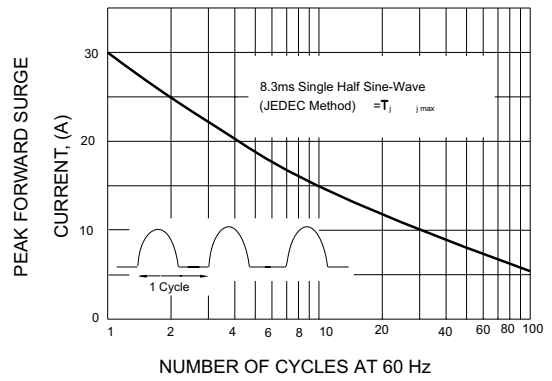


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

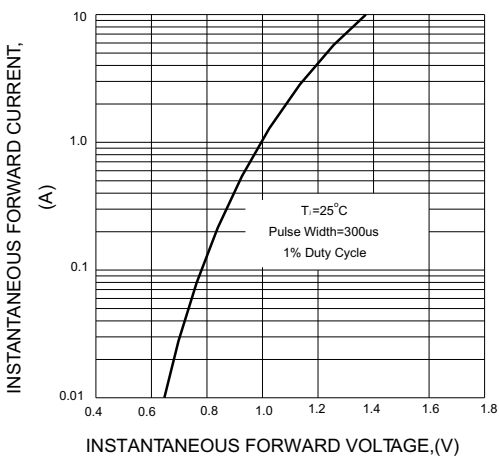


FIG.4-TYPICAL REVERSE CHARACTERISTICS

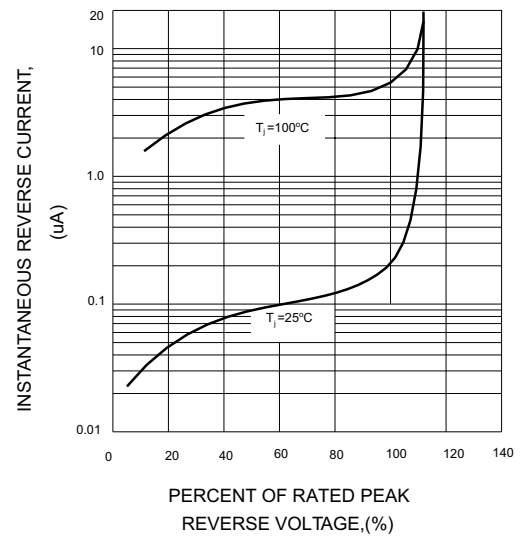


FIG.5-TYPICAL JUNCTION CAPACITANCE

