



Micro Commercial Components

Micro Commercial Components
 20736 Marilla Street Chatsworth
 CA 91311
 Phone: (818) 701-4933
 Fax: (818) 701-4939

EM513 THRU EM518

Features

- 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
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL rating 1

Maximum Ratings

- Operating Temperature: -65°C to +175°C
- Storage Temperature: -65°C to +175°C

MCC 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

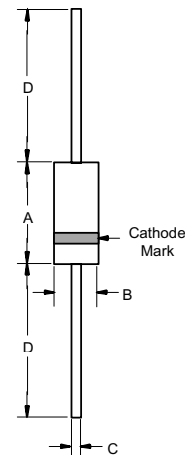
Average Forward Current	I_O	1.0A	.375" (9.5mm) Lead Length $T_A = 55^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage EM513~EM516 EM518	V_F	1.1V 1.2V	$I_{FM} = 1.0A$; $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5µA 50µA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$
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.

1.0 Amp General Purpose Plastic Rectifier 1600 to 2000 Volts

DO-41



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.166	.205	4.10	5.20	
B	.080	.107	2.00	2.70	
C	.028	.034	.70	.90	
D	1.000	---	25.40	---	

EM513 THRU EM518

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

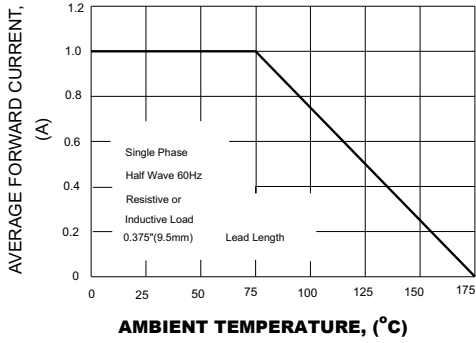


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

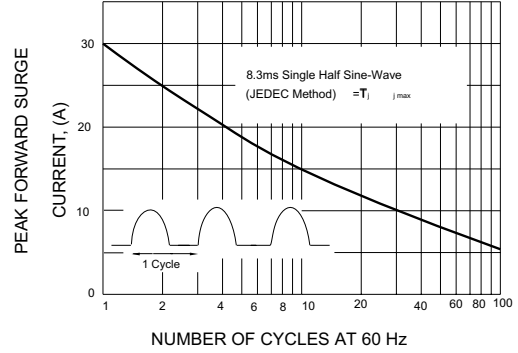


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

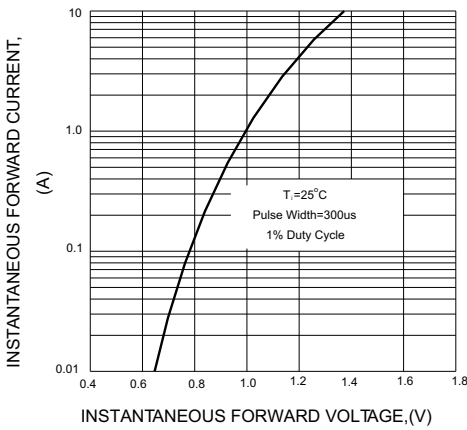


FIG.4-TYPICAL REVERSE CHARACTERISTICS

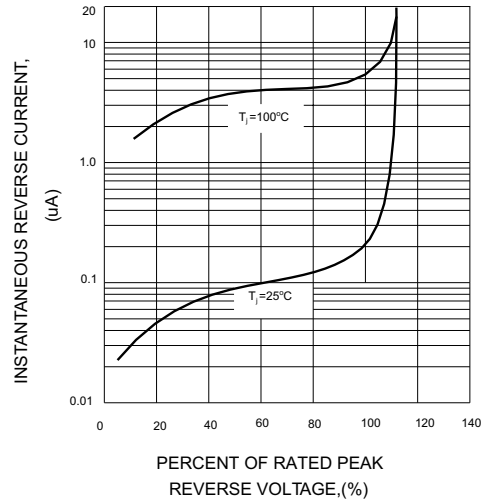
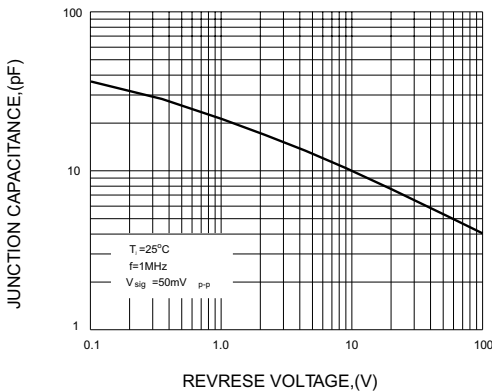


FIG.5-TYPICAL JUNCTION CAPACITANCE





Micro Commercial Components

Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel; 5Kpcs/Reel
(Part Number)-AP	Ammo Packing;5Kpcs/AmmoBox
(Part Number)-BP	Bulk;1Kpcs/Box

IMPORTANT NOTICE

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes .
Micro Commercial Components Corp. does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold *Micro Commercial Components Corp.* and all the companies whose products are represented on our website, harmless against all damages.

APPLICATIONS DISCLAIMER

Products offer by *Micro Commercial Components Corp.* are not intended for use in Medical, Aerospace or Military Applications.