

Features

- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix Designates Compliant. See Ordering Information)
- Low Leakage Current
- Glass Passivated Junction
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range:-55°C to +150°C
- Typical Thermal Resistance: 50°C/W Junction to Ambient
- Typical Thermal Resistance: 28°C/W Junction to Case

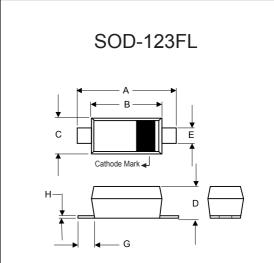
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SM4001PL	A1	50V	35V	50V
SM4002PL	A2	100V	70V	100V
SM4003PL	A3	200V	140V	200V
SM4004PL	A4	400V	280V	400V
SM4005PL	A5	600V	420V	600V
SM4006PL	A6	800V	560V	800V
SM4007PL	A7	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I _{F(AV)}	1.0A	T _A =75°C
Peak Forward Surge Current	I _{FSM}	30A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage	V _F	1.1V	I _F =1.0A; T _A =25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I _R	5.0μA 50μA	T _A =25°C; T _A =100°C
Maximum Full Load Reverse Current Average ,Full Cycle 9.5mm Lead Length	I _R	30μΑ	T _L =75°C;
Typical Junction Capacitance	CJ	10 pF	Measured at 1.0MHz, V _R =4.0V
Typical Reverse Recovery Time	t _{rr}	>1000ns	I _F =0.5A,I _R =1.0A I _{RR} =0.25A

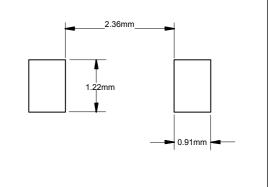
Note: 1. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.

1.0 Amp Silicon Rectifier 50 to 1000 Volts



DIMENSIONS							
NOTE							
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SUGGESTED SOLDER PAD LAYOUT





Curve Characteristics

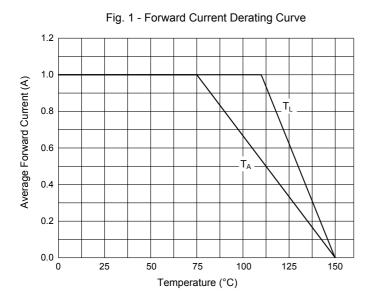


Fig. 3 - Typical Instantaneous Forward Characteristics

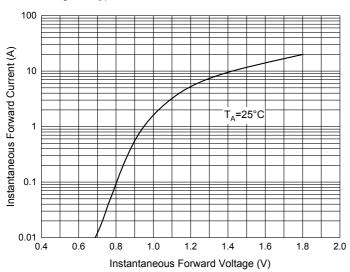
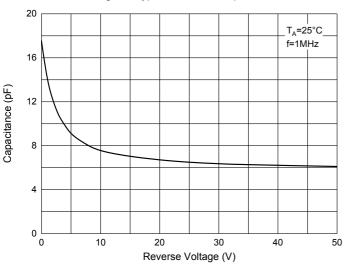


Fig. 5 - Typical Junction Capacitance



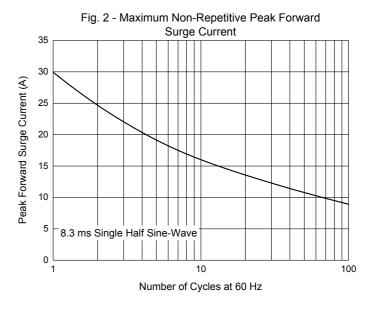
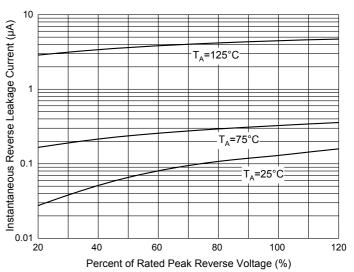


Fig. 4 - Typical Reverse Leakage Characteristics





Ordering Information

Device	Packing	
Part Number-TP	Tape&Reel: 2.5Kpcs/Reel	
Part Number-13P	Tape&Reel: 10Kpcs/Reel	

Note: Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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