

NOT RECOMMENDED FOR NEW DESIGNS

MCC

Micro Commercial Components



Micro Commercial Components
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**SM4933
THRU
SM4937**

Features

- Halogen free available upon request by adding suffix "-HF"
- Lead Free Finish/RoHS Compliant(NOTE 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Metalurgically Bonded Construction
- Low Cost and Low Leakage Current
- Fast Switching

Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 30 °C/W Junction To Lead

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SM4933	4933	50V	35V	50V
SM4934	4934	100V	70V	100V
SM4935	4935	200V	140V	200V
SM4936	4936	400V	280V	400V
SM4937	4937	600V	420V	600V

Electrical Characteristics @ 25°C Unless Otherwise Specified

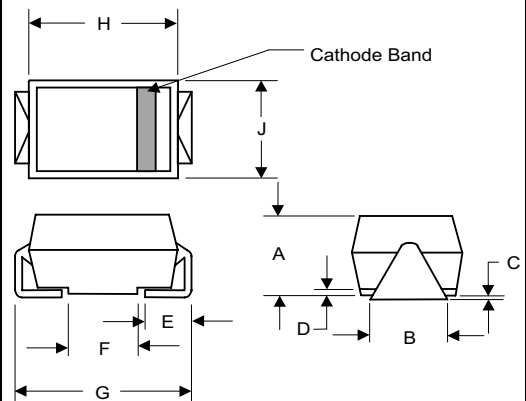
Average Forward Current	$I_{F(AV)}$	1.0A	$T_A = 55^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	1.3V	$I_{FM} = 1.0\text{A}; T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5.0 μA 100 μA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Maximum Reverse Recovery Time	T_{rr}	200ns	$I_F = 1.0\text{A}, V_R = 30\text{V}$
Typical Junction Capacitance	C_J	15pF	Measured at 1.0MHz, $V_R = 4.0\text{V}$

*Pulse test: Pulse width 300 μsec , Duty cycle 1%

Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

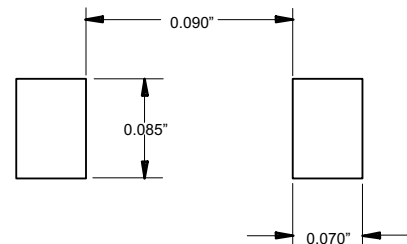
**1 Amp Fast Recovery
Rectifier
50 - 600 Volts**

**DO-214AC
(HSPA) (High Profile)**



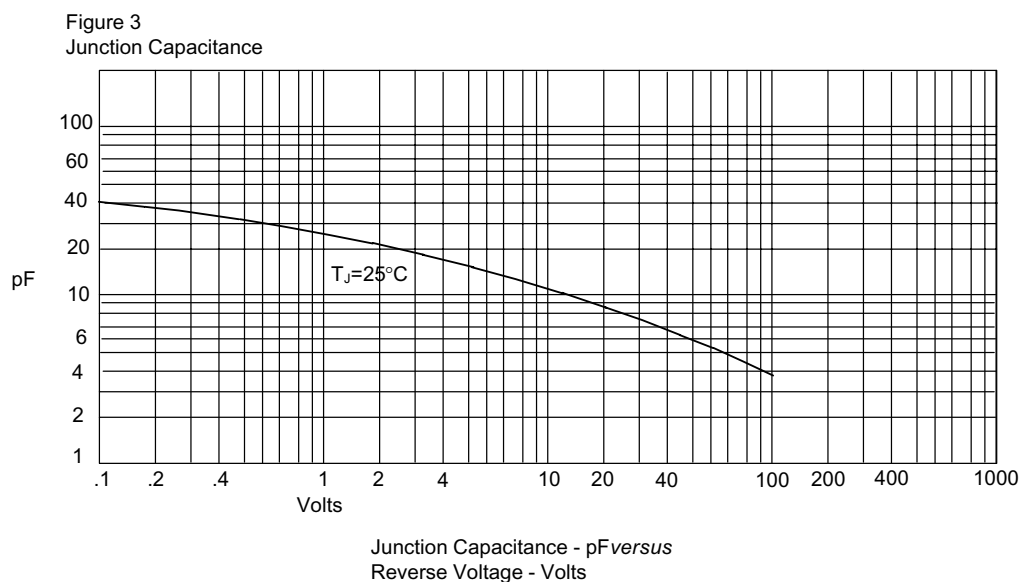
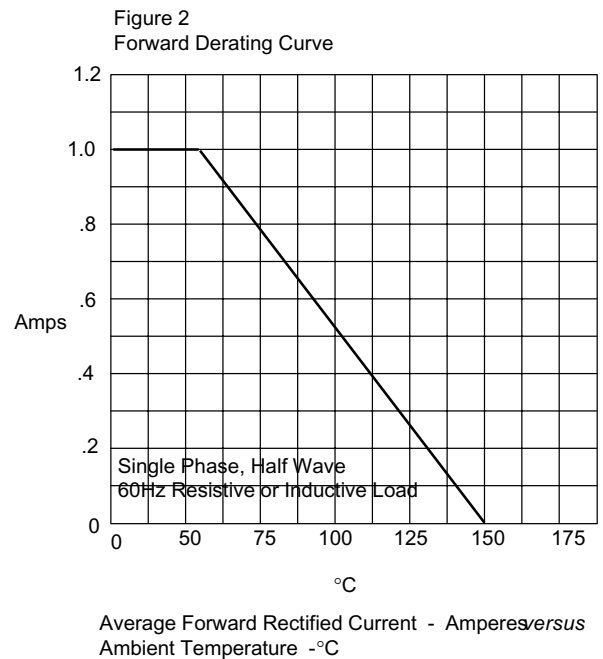
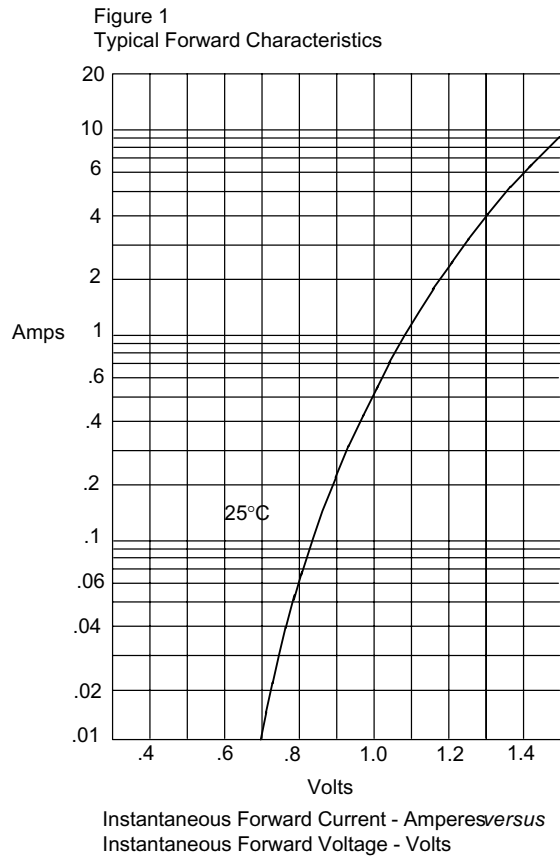
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.078	.116	1.98	2.95	
B	.067	.089	1.70	2.25	
C	.002	.008	.05	.20	
D	---	.02	---	.51	
E	.035	.055	.89	1.40	
F	.065	.096	1.65	2.45	
G	.205	.224	5.21	5.69	
H	.160	.180	4.06	4.57	
J	.100	.112	2.57	2.84	

**SUGGESTED SOLDER
PAD LAYOUT**



www.mccsemi.com

SM4933 thru SM4937

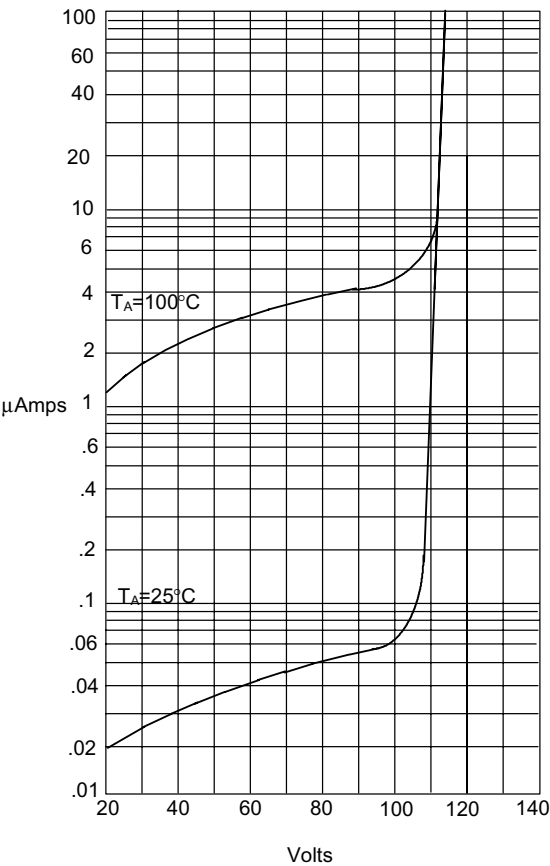


SM4933 thru SM4937



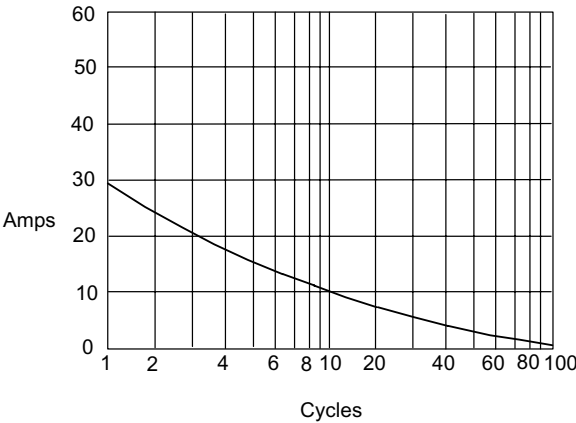
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Figure 4
Typical Reverse Characteristics



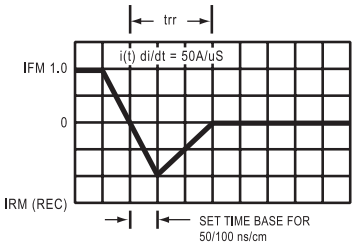
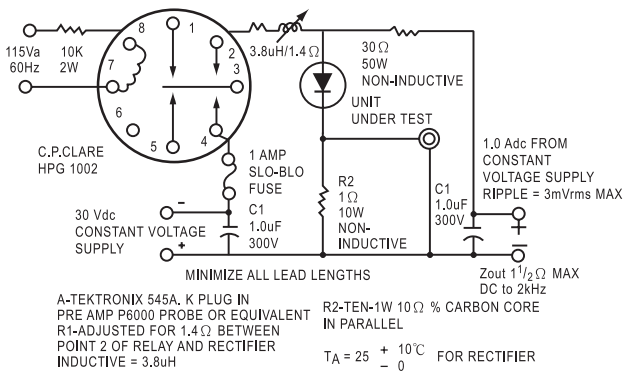
Instantaneous Reverse Leakage Current - MicroAmperes versus
Percent Of Rated Peak Reverse Voltage - Volts

Figure 5
Peak Forward Surge Current



Peak Forward Surge Current - Amperes versus
Number Of Cycles At 60Hz - Cycles

Figure 6
Reverse Recovery Time Characteristic And Test Circuit Diagram





TM

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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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