



Micro Commercial Components



Micro Commercial Components
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M1
THRU
M7

1.0 Amp
Silicon Rectifier
50 to 1000 Volts

Features

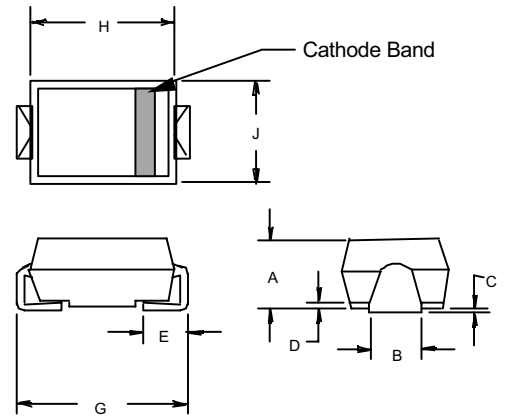
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL rating 1
- Easy Pick And Place
- High Temp Soldering: 260°C for 10 Seconds At Terminals
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)

Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 15°C/W Junction To Lead

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
M1	M1	50V	35V	50V
M2	M2	100V	70V	100V
M3	M3	200V	140V	200V
M4	M4	400V	280V	400V
M5	M5	600V	420V	600V
M6	M6	800V	560V	800V
M7	M7	1000V	700V	1000V

DO-214AC
(SMAE)



DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.079	.096	2.01	2.44	
B	.045	.071	1.15	1.80	
C	.002	.008	.05	.20	
D	—	.02	—	.51	
E	.030	.060	.76	1.52	
G	.189	.208	4.80	5.30	
H	.157	.180	4.00	4.57	
J	.090	.115	2.29	2.92	

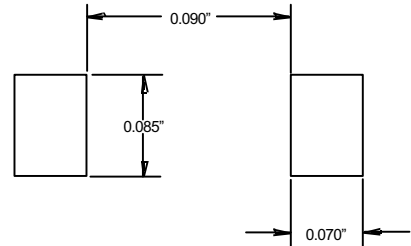
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward current	$I_{F(AV)}$	1.0A	$T_a = 75^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, half sine,
Maximum Instantaneous Forward Voltage	V_F	1.1V	$I_{FM} = 1.0A;$ $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	10µA 50µA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical Junction Capacitance	C_J	15pF	Measured at 1.0MHz, $V_R=4.0V$

*Pulse test: Pulse width 300 µsec, Duty cycle 2%

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

SUGGESTED SOLDER PAD LAYOUT



M1 thru M7

Figure 1
Typical Forward Characteristics

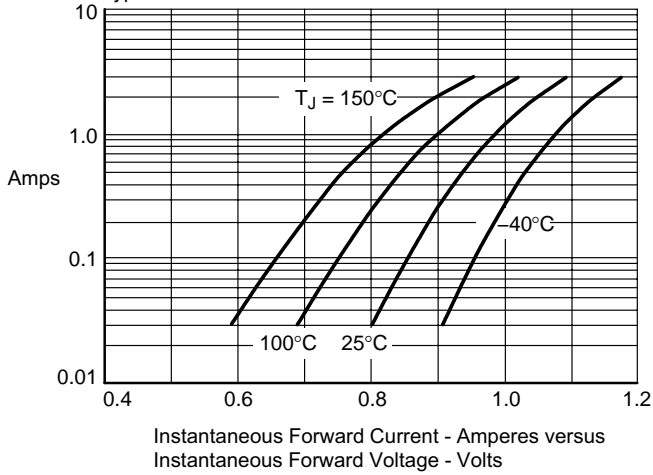


Figure 2
Maximum Forward Surge Current

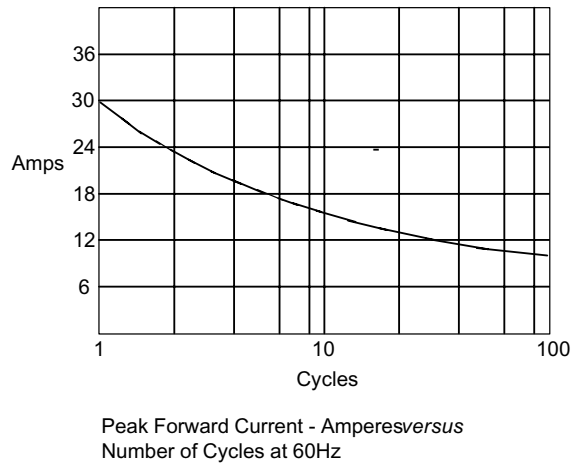


Figure 3
Forward Derating Curve

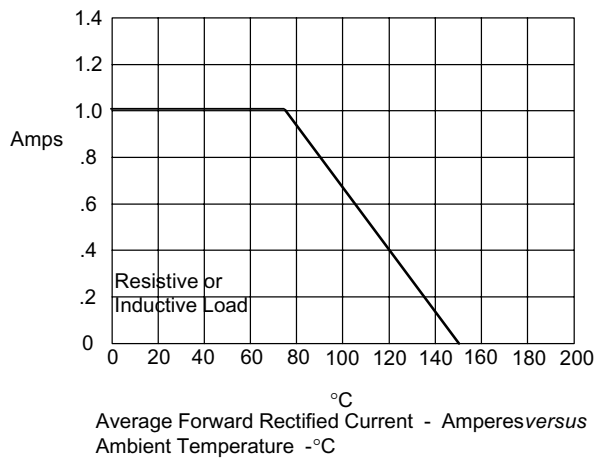
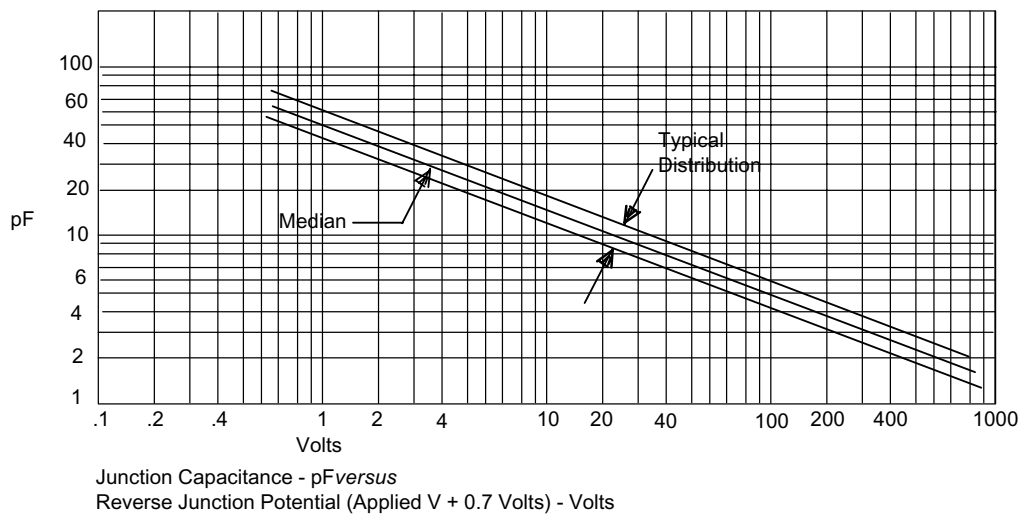
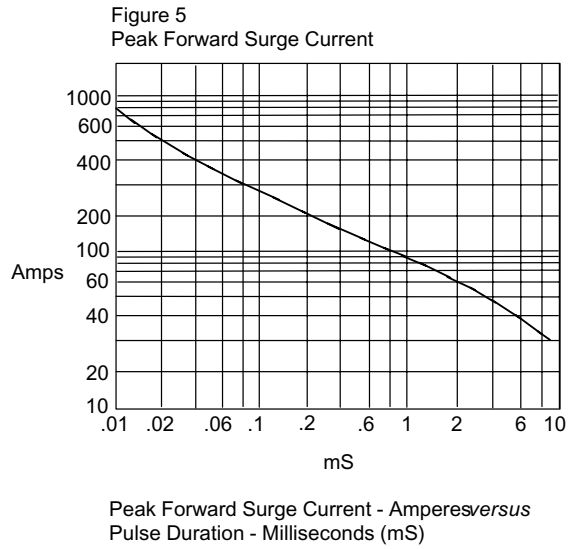


Figure 4
Junction Capacitance



M1 thru M7





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Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel;2Kpcs/Reel (7");6Kpcs/Reel(13")

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