

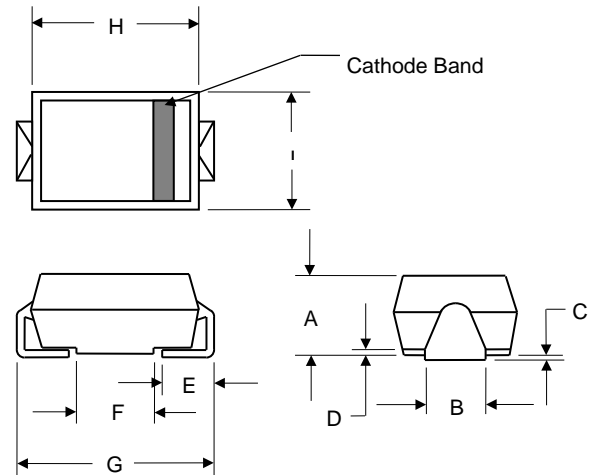
### Features

- \* For surface mounted application
- \* Low Forward Voltage Drop
- \* High Current Capability
- \* Easy Pick and Place
- \* High Surge Current Capability
- \* Plastic Material Used Carries Underwriters Laboratory Classification 94V-0



### Package Outline Dimensions in inches (millimeters)

#### SMA(W):



DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	.078	.116	1.98	2.95
B	.067	.089	1.70	2.25
C	.002	.008	0.05	0.20
D	-----	.020	-----	0.51
E	.035	.055	0.89	1.40
F	.065	.091	1.65	2.32
G	.205	.224	5.21	5.69
H	.160	.180	4.06	4.57
J	.100	.112	2.57	2.84

### Mechanical Data

- \* Case: DO-214AC Molded plastic
- \* Terminals: Solder plated
- \* Polarity: Indicated by cathode band
- \* Standard packaging: 12mm tape(ELA STD RS-481)

### Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Type Number	Symbols	M1	M2	M3	M4	M5	M6	M7	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum D.C Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current $T_L=75^\circ C$	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current, 8.3ms single half sine-wave	$I_{FSM}$	30							A
Maximum Instantaneous Forward Voltage at 1.0A	$V_F$	1.1							V
Maximum D.C Reverse Current @ $T_A=25^\circ C$ at Rated D.C Blocking Voltage @ $T_A=100^\circ C$	$I_R$	5.0 50							$\mu A$
Maximum Reverse Recovery Time(Note1)	$T_{rr}$	1.8							$\mu S$
Typical Junction Capacitance(Note2)	$C_J$	8							pF
Operating and Storage Temperature Range	$T_J/T_{STG}$	-55 to +125/-55 to +150							$^\circ C$

Note: 1、 Reverse Recovery Test Conditions:  $I_F=0.5A$ ,  $I_R=1.0A$ ,  $I_{RR}=0.25A$ . 2、 Measured at 1MHz and applied reverse voltage of 4.0V D.C.

### Ratings and Characteristic Curves

FIG. 1 – FORWARD CURRENT DERATING CURVE

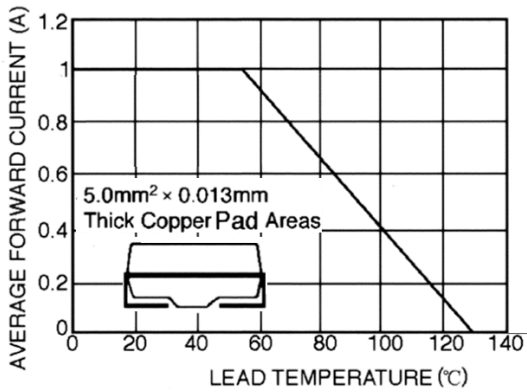


FIG. 2 – MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

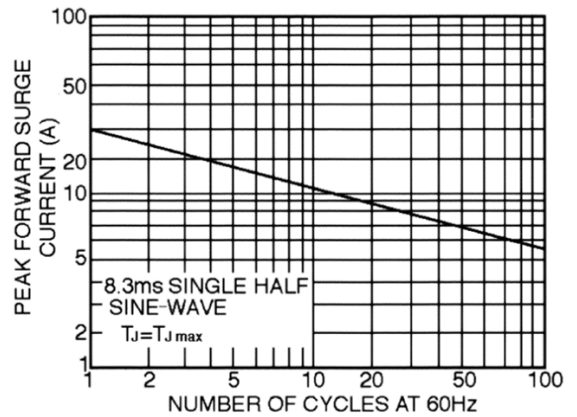


FIG. 3 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

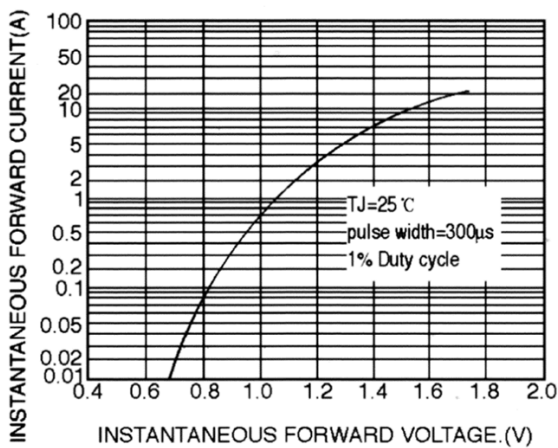


FIG. 4 – TYPICAL JUNCTION CAPACITANCE

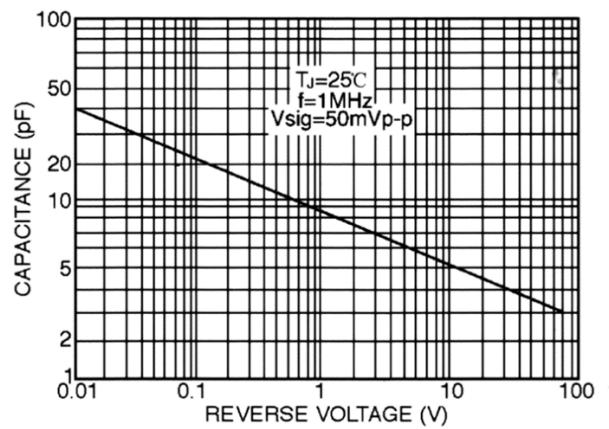
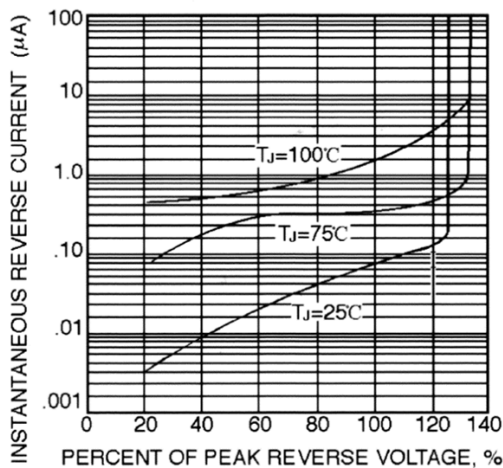


FIG. 5 – TYPICAL REVERSE CHARACTERISTICS





**M1 THRU M7**  
**1.0 Amp. Surface Mount Rectifiers**

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**Ordering Information**

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<b>Part No.</b>	<b>Package</b>	<b>Packing</b>
M1~M7	SMA(W)	5K/Reel
M1~M7	SMA(W)	6K/Reel
M1~M7	SMA(W)	7.5K/Reel