

# MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

## M1 - M7

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Product specification


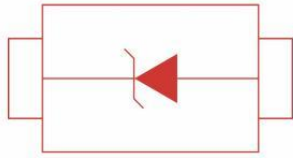
**FEATURES**

- Ideal for surface mount applications
- Easy pick and place
- Built-in strain relief
- High surge current capability

**MECHANICAL DATA**

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Terminals: Solder plated, solderable per MIL-STD-202F, method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Weight: 0.063 gram

**Reference News**

PACKAGE OUTLINE	PIN CONFIGURATION	PINNING	
		PIN	DESCRIPTION
		1	Cathode
		2	A node

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

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

TYPE NUMBER	M1	M2	M3	M4	M5	M6	M7	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at Ta=75°C	1.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	30							A
Maximum Instantaneous Forward Voltage at 1.0A	1.1							V
Ta=25°C	5.0							µA
Ta=100°C	50							µA
Typical Junction Capacitance (Note 1)	15							pF
Typical Thermal Resistance R JA (Note 2)	50							°C/W
Operating and Storage Temperature Range Tj , Tstg	-65—+150							°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance from Junction to Ambient.

**RATING AND CHARACTERISTIC CURVES (M1THRU M7)**

FIG.1-TYPICAL FORWARD CHARACTERISTICS

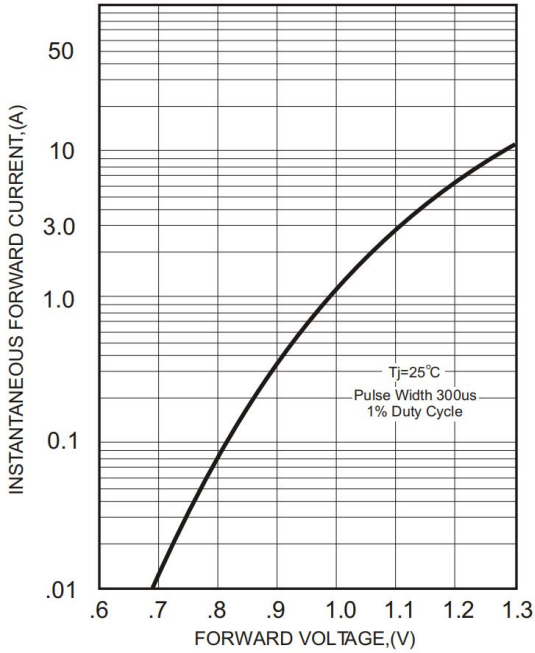


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

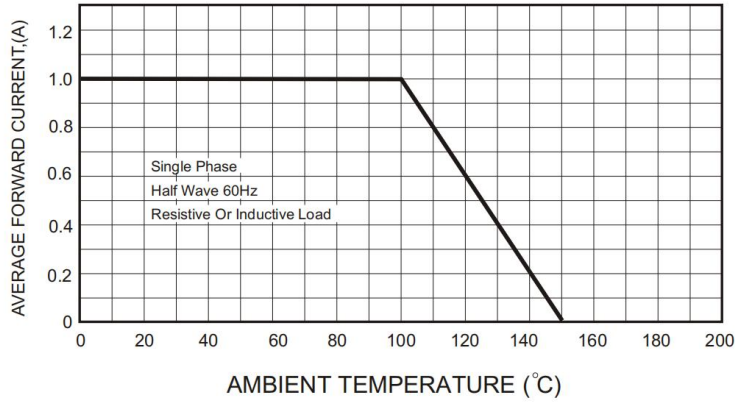


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

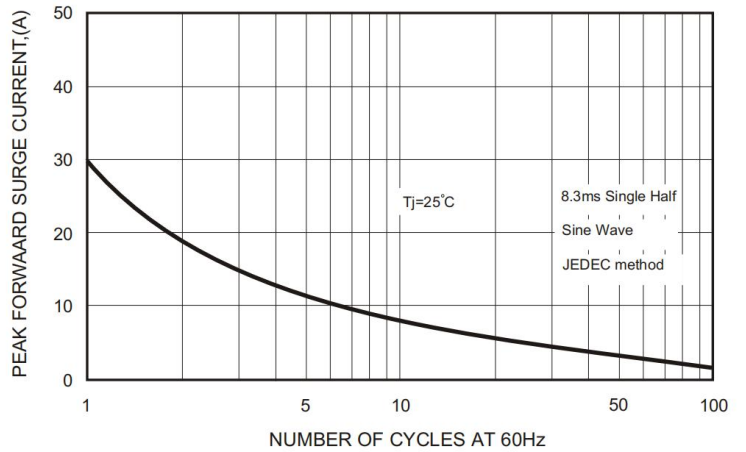


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

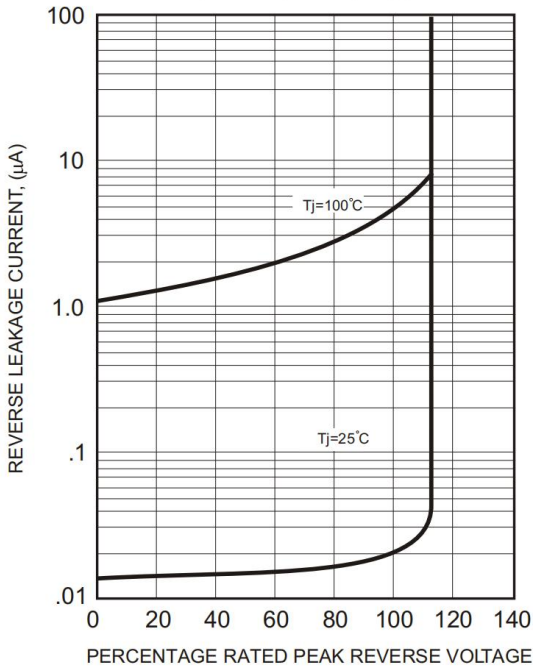
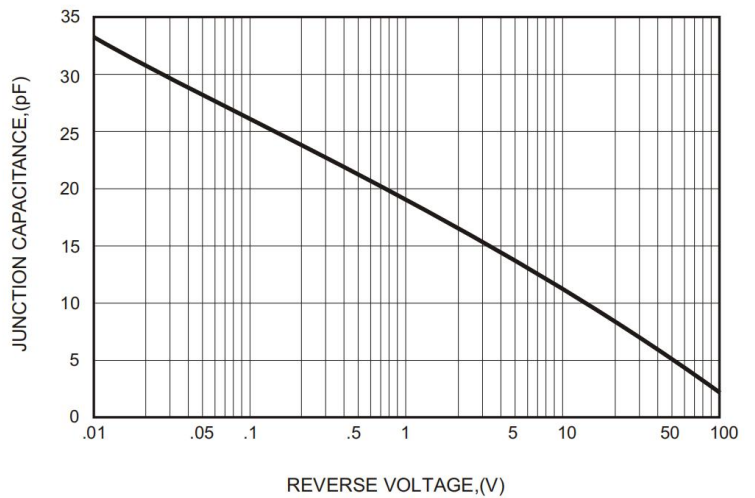
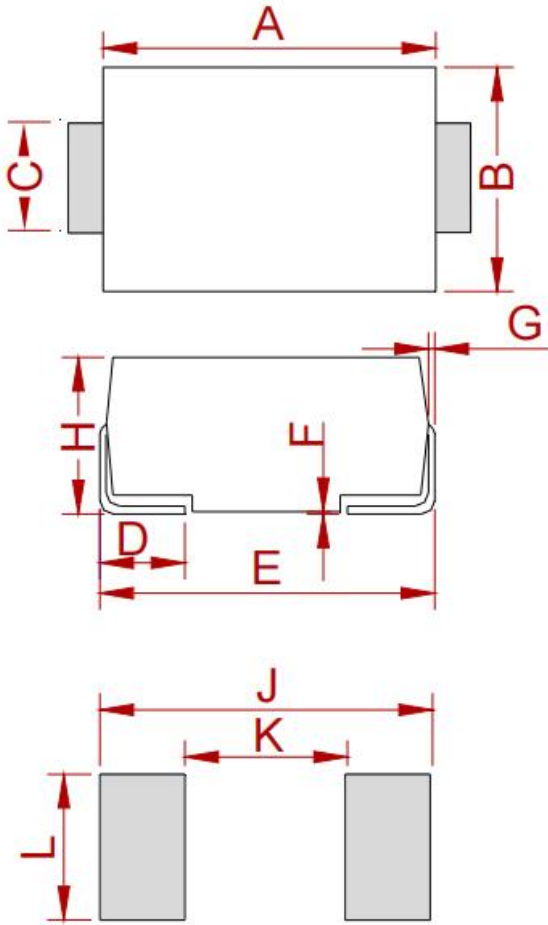


FIG.5-TYPICAL JUNCTION CAPACITANCE



**PACKAGE MECHANICAL DATA**



**SMA**

Ref.	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	4.25	4.65	0.167	0.183
B	2.50	2.90	0.098	0.114
C	1.35	1.65	0.053	0.065
D	0.76	1.52	0.030	0.060
E	4.93	5.28	0.194	0.208
F	0.051	0.203	0.002	0.008
G	0.15	0.31	0.006	0.012
H	1.98	2.41	0.078	0.095
J	6.50		0.256	
K		2.30		0.090
L	1.70		0.067	

**REEL SPECIFICATION**

P/N	PKG	QTY
M1-M7	SMA	2000

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