



M1 THRU M7

SURFACE MOUNT GENERAL RECTIFIER

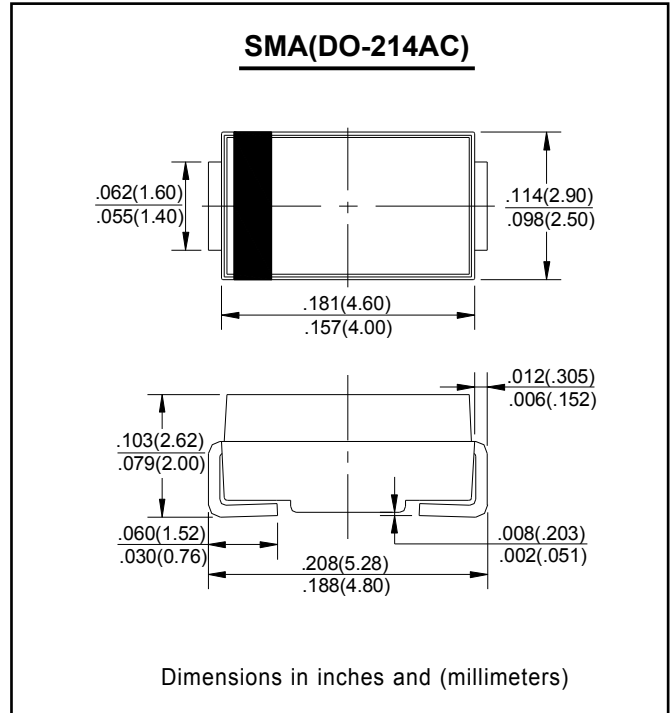
Reverse Voltage - 50 to 1000 Volts Forward Current - 1.0 Ampere

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low reverse leakage
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed: 250°C/10 seconds at terminals

MECHANICAL DATA

Case: JEDEC SMA/DO-214AC molded plastic body
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.003 ounce, 0.093 grams
 0.004 ounce, 0.111 grams SMA(H)



Maximum Ratings and Electrical Characteristics @_{T_A}=25°C unless otherwise specified

Characteristic	Symbol	M1	M2	M3	M4	M5	M6	M7	Unit	
Peak Repetitive Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V	
Working Peak Reverse Voltage	V _{RWM}									
DC Blocking Voltage	V _R									
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V	
Average Rectified Output Current @ _{T_L} = 100°C	I _o	1.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30								A
Forward Voltage @ _{I_F} = 1.0A	V _{FM}	1.10								V
Peak Reverse Current @ _{T_A} = 25°C At Rated DC Blocking Voltage @ _{T_A} = 125°C	I _{RM}	5.0 200								μA
Typical Junction Capacitance (Note 2)	C _j	15								pF
Typical Thermal Resistance (Note 3)	R _{θJL}	30								°C/W
Operating and Storage Temperature Range	T _j , T _{STG}	-55 to +150°C								°C

Note: 1. Measured with I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A,
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
 3. Mounted on P.C. Board with 8.0mm² land area.



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RATINGS AND CHARACTERISTIC CURVES

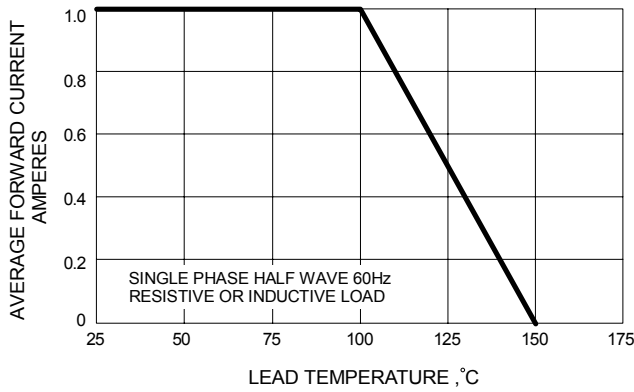


FIG.1 Forward Current Derating Curve

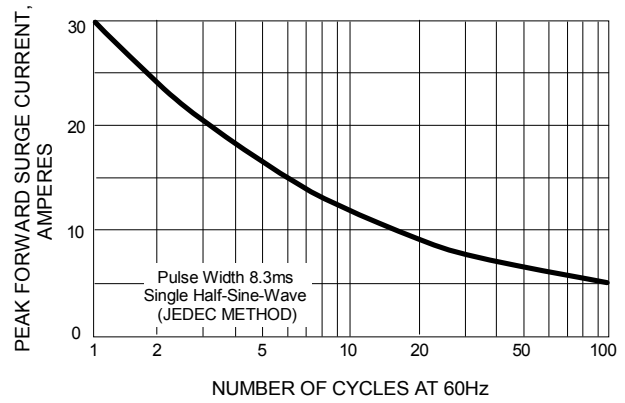


FIG.2 Maximum Non-Repetitive Surge Current

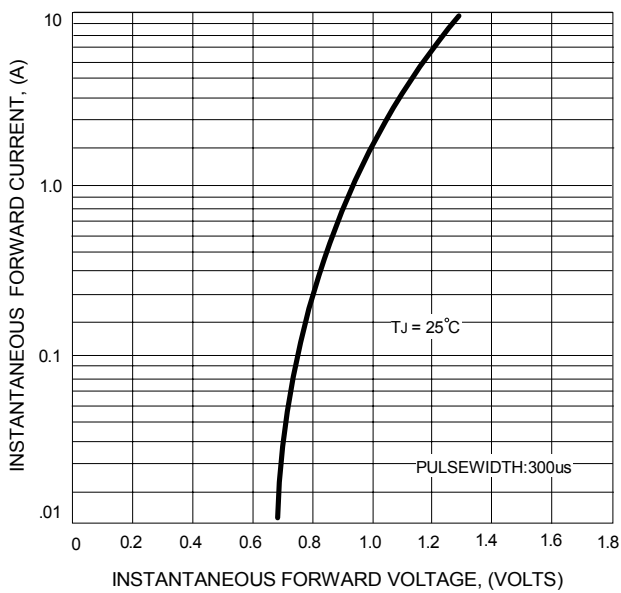


FIG.3 Typical Forward Characteristics

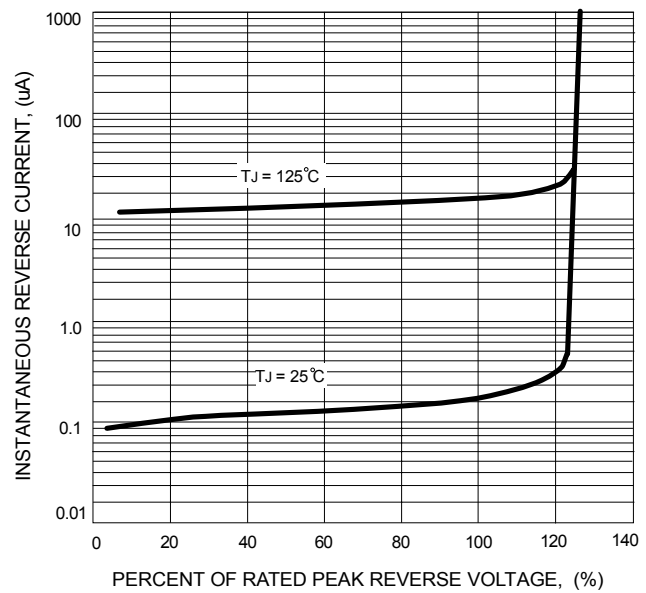


FIG.4 Typical Reverse Characteristics