SEMICONDUCTOR

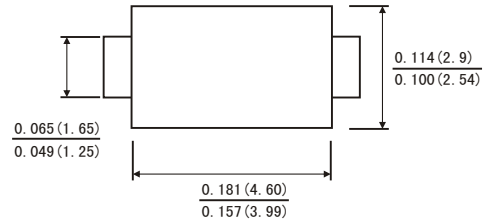
Surface Mount Glass Passivated Rectifier

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

FEATURES

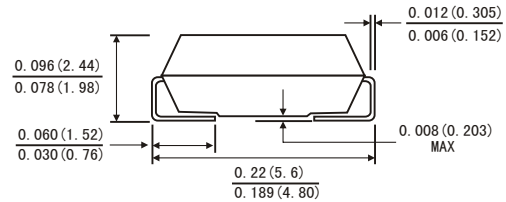
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- For surface mounted applications
- Built-in strain relief, ideal for automated placement
- High temperature soldering guaranteed:260 °C/10 seconds at terminals
  Component in accordance to RoHs 2002/95/EC and WEEE 2002/96/EC

SMA(DO-214AC)



MECHANICAL DATA

- Case: JEDEC DO-214AC molded plastic over glass passivated chip
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- *Mounting Position*: Any
- Weight: 0.002 oz., 0.064 g



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	Symbols	M1	M2	M3	M4	M5	M6	M7	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum average Forward Rectified Current 0.375"(9.5mm) lead length at T_A=75℃	$I_{(AV)}$	1.0							Amp
Peak Forward Surge Current (8.3ms half sine-wave superimposed on rated load (JEDEC method) T_A=75℃	I_{FSM}	30.0							Amps
Maximum Instantaneous Forward Voltage at 1.0 A	V_F	1.1							Volts
Maximum Reverse current at rated DC Blocking Voltage T_A =25℃	I_R	5.0							μA
T_A =125℃		50.0							
Typical Thermal resistance (Note 2)	$R_{\theta JL}$	30							℃/W
Typical Junction Capacitance(Note 1)	C_J	15							pF
Operating and Storage temperature Range	T_J T_{STG}	-65 to+175							℃

Note: 1.Measured at 1MHz and applied reverse voltage of 4.0V DC.

2.Thermal resistance from junction to ambient and from junction to lead at 0.375"(9.5mm)lead length, P.C.B. mounted

RATINGS AND CHARACTERISTIC CURVES M1 THRU M7

FIG.1-FORWARD CURRENT DERATING CURVE

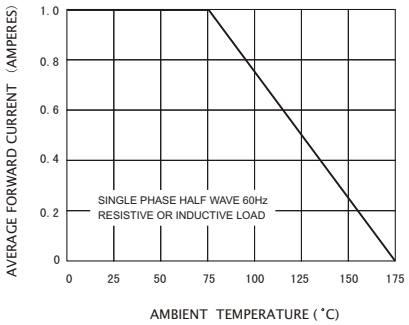


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

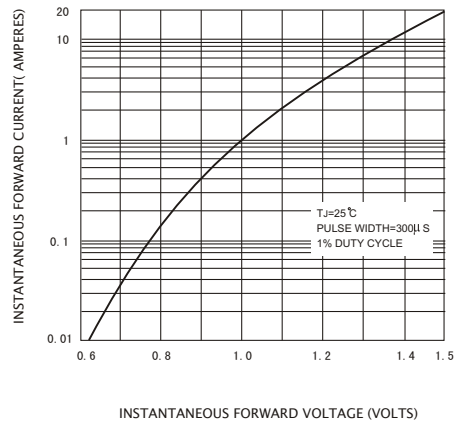


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

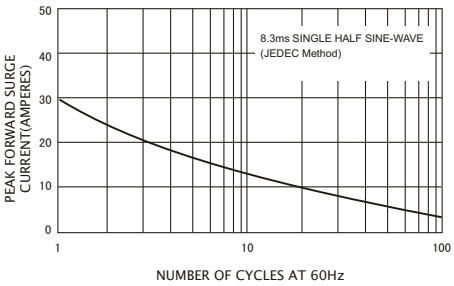


FIG.4-TYPICAL REVERSE CHARACTERISTICS

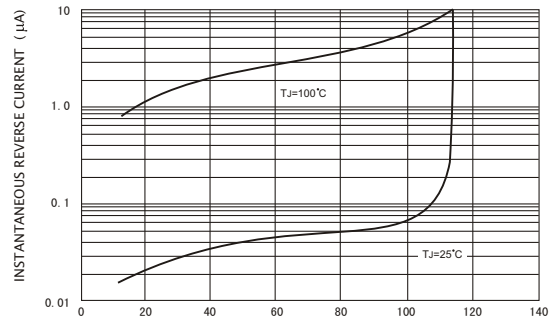


FIG.5-TYPICAL JUNCTION CAPACITANCE