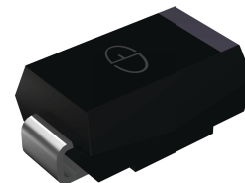


Features

- For surface mounted applications
- Low profile package
- Built-in strain relief
- Easy pick and place
- Low forward voltage drop
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- High temperature soldering : 260°C /10 seconds at terminals



Package: DO-214AC (SMA)

Mechanical Data

- Case: Molded plastic, SMA
- Terminals: Solder plated, solderable per MIL-STD-750, method 2026 guaranteed
- Polarity: Color band denotes cathode end
- Packaging: 12mm tape per EIA STD RS-481
- Weight: 0.002 ounce, 0.064 gram

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 current by 20%.

	Symbol	M1	M2	M3	M4	M5	M6	M7	Unit
Maximum Repetitive 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 DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at $T_L=75^\circ\text{C}$	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current, (8.3ms single half-sine-wave superimposed on rated load, JEDEC method)	I_{FSM}	30							A
Maximum Forward Voltage at 1.0A	V_F	1.1							V
Maximum Reverse Current at $T_A=25^\circ\text{C}$	I_R	5.0							μA
Rated DC Blocking Voltage $T_A=125^\circ\text{C}$		100							
Typical Junction Capacitance (Note 1)	C_J	12							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	28							$^\circ\text{C/W}$
Maximum Reverse Recovery Time (Note 3)	T_{RR}	2.5							μs
Operating Junction Temperature Range	T_J	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to +150							$^\circ\text{C}$

Notes:

- 1, Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- 2, Thermal resistance from junction to ambient mounted on P.C.B. with 0.3 x 0.3" (8.0 x 8.0mm) copper pad areas
- 3, Reverse recovery test condition: $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{RR}=0.25\text{A}$.

Ratings and Characteristic Curves

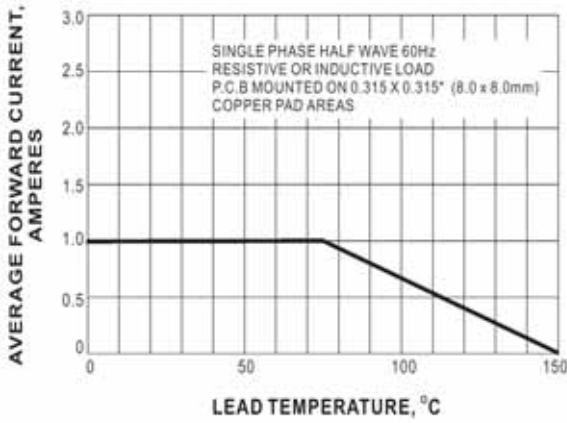


Fig.1-FORWARD CURRENT DERATING CURVE

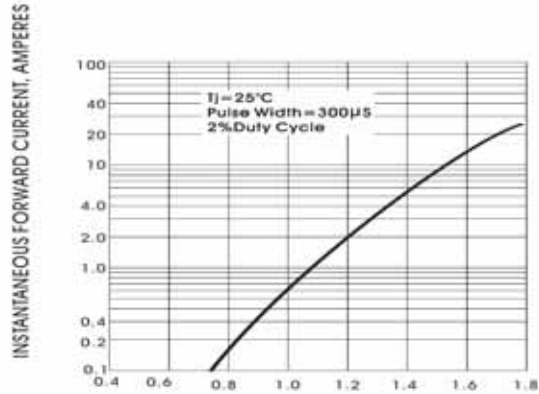


Fig. 2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER ELEMENT

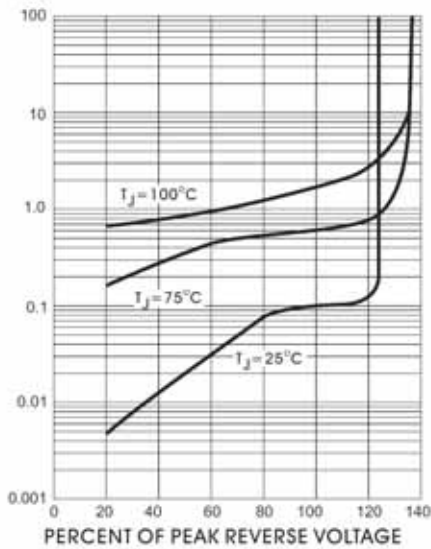


Fig. 3- TYPICAL REAK REVERSE CHARACTERISTICS

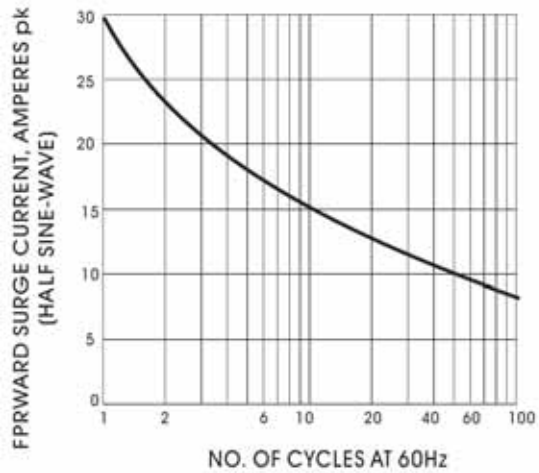


Fig. 4- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

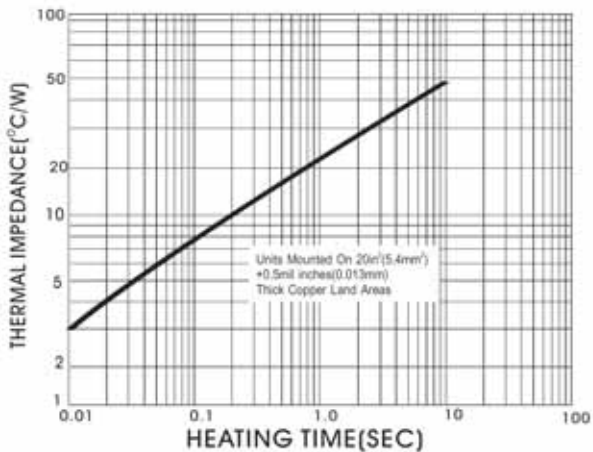


Fig. 5- TRANSIENT THERMAL IMPEDANCE

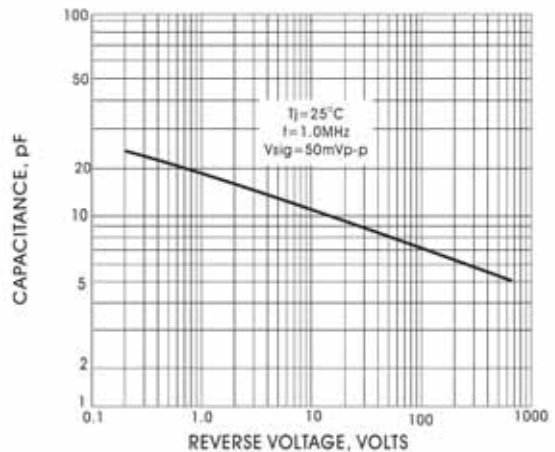


Fig. 6- TYPICAL JUNCTION CAPACITANCE PER ELEMENT

Package Outline Dimensions

in inches (millimeters)

DO-214AC(SMA)

