

Features

- Glass passivated standard rectifiers
- Ideal for automated placement
- Low forward voltage drop
- High forward surge capability
- Moisture sensitivity: level 1, per J-STD-020
- AEC-Q101 qualified



DO-214AC(SMA)



RoHS
COMPLIANT

Typical Applications

- For use of general purpose rectification in lighting, cellular phone, portable device,

Mechanical Data

- Case:DO-214AC, molded epoxy body, Epoxy meets UL 94V-0 flammability rating
- Terminal: Matte tin plated leads, solderable per J-STD-002 and JESD22B-106
- Polarity: Indicated by cathode band

Absolute Maximum Ratings and Electrical Characteristics

(single-phase, half-wave, 60HZ, T_A=25°C unless otherwise noted)

Parameter	Symbol	V1	V2	V3	V4	V5	V6	V7	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	I _{F(AV)}	1.0								A
Peak Forward Surge Current (8.3 ms single half sine-wave superimposed on rated load)	I _{FSM}	30.0								A
Maximum Forward Voltage at I _F =1.0A	V _F	1.0								V
Maximum DC Reverse Current @T _a =25°C at rated DC Blocking Voltage @T _a =125°C	I _R	5.0 50.0								uA
Typical Junction Capacitance(Note1)	C _J	10.0								pF
Typical Thermal Resistance(Note2)	R _{θJA}	75.0								°C/W
Typical Thermal Resistance(Note2)	R _{θJL}	20.0								°C/W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	- 55 to + 150								°C

Notes:1.Measured at 1.0MHz and applied reverse voltage of 4.0 D.C.

2.Thermal resistance from junction to lead, 0.197×0.197^{''}(5.0×5.0mm) copper pads to each terminal

Ratings and Characteristics Curves

($T_A = 25^\circ\text{C}$ unless otherwise noted)

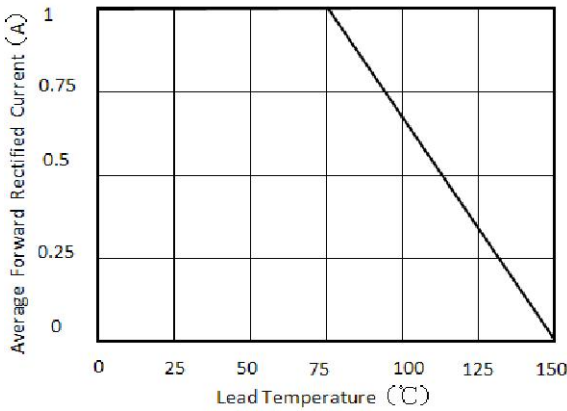


Figure 1. Forward Current Derating Curve

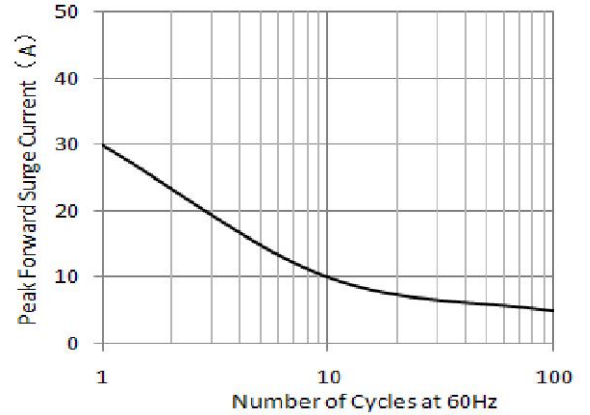


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

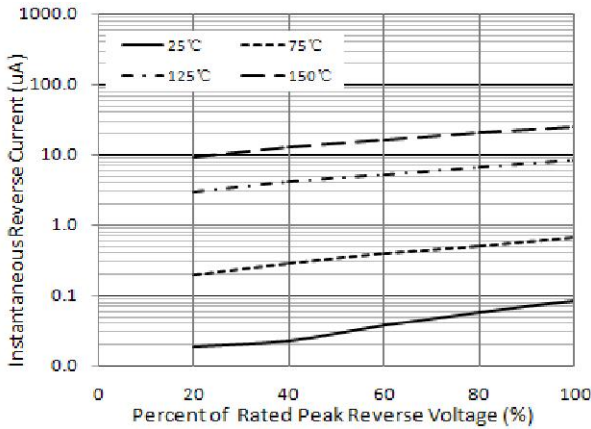


Figure 3. Typical Reverse Characteristics

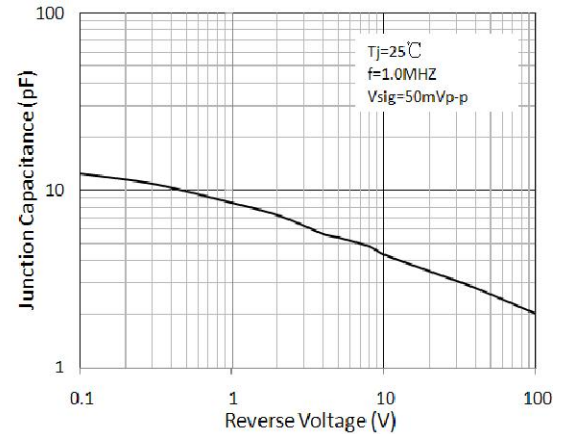


Figure 4. Typical Junction Capacitance

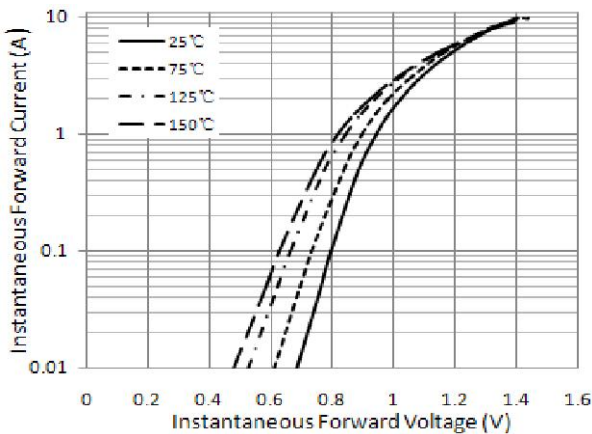
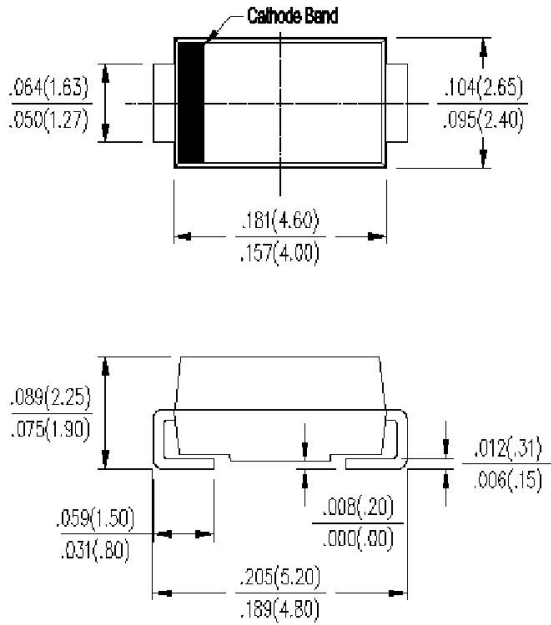


Figure 5. Typical Instantaneous Forward Characteristics

Package Outline Dimensions in inches (millimeters)

DO-214AC(SMA)



MOUNTING PAD LAYOUT

