



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

STEIFPOWER

TECHNOLOGY

· AEC-Q101 qualified



DO-214AC(SMA)



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	V 7	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							Α
Peak Forward Surge Current (8.3 ms single half sine-wave superimposed on rated load)	I _{FSM}	30.0							Α
Maximum Forward Voltage at I _F =1.0A	V _F	1.0							V
Maximum DC Reverse Current @Ta=25°C		5.0							uA
at rated DC Blocking Voltage @Ta=125°C	I _R	50.0							
Typical Junction Capacitance(Note1)	CJ	10.0							pF
Typical Thermal Resistance(Note2)	$R_{\theta JA}$	75.0							°C/W
Typical Thermal Resistance(Note2)	$R_{\theta JL}$	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

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

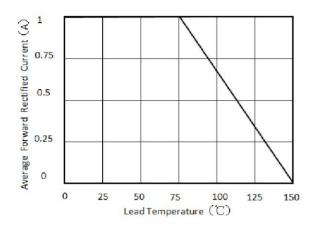


Figure 1. Forward Current Derating Curve

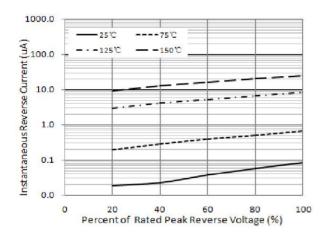


Figure 3. Typical Reverse Characteristics

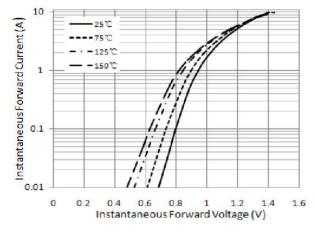


Figure 5. Typical Instantaneous Forward Characteristics

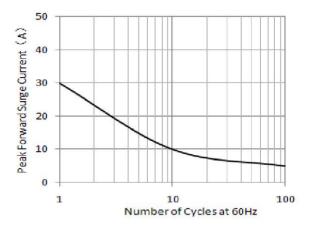


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

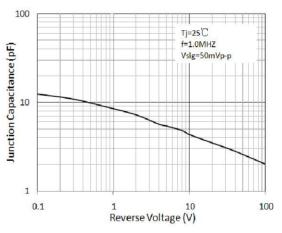


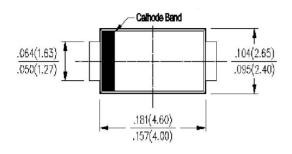
Figure 4. Typical Junction Capacitance

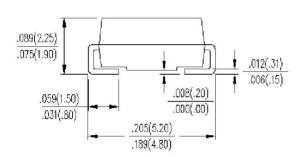




Surface Mount Glass Passivated Standard Rectifier Reverse Voltage 50~1000V Forward Current 1A

Package Outline Dimensions in inches (millimeters) DO-214AC(SMA)





MOUNTING PAD LAYOUT

