

# V1 thru V7Surface Mount Glass Passivated Standard RectifierReverse Voltage 50~1000VForward Current 1A

COMPLIANT

### **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

# **Typical Applications**

DO-214AC(SMA)

• For use of general purpose rectification in lighting, cellular phone, portable device, power supplies and other consumer applications.

## **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

### **Maximum Ratings and Electrical Characteristics**

(TA = 25 °C unless otherwise noted)

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Parameter		Symbols	V1	V2	V3	V4	V5	V6	V7	Unit
Maximum repetitive peak reverse voltage		VRRM	50	100	200	400	600	800	1000	V
Maximum RMS voltage		VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage		VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified current TL (See Fig.1)		IF(AV)	1.0						А	
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load		IFSM	35.0						А	
Maximum forward voltage at I <sub>F</sub> =1.0Amps		V <sub>F</sub>	0.98						Volts	
Maximum DC reverse current at rated DC blocking voltage	@Ta=25℃	I <sub>R</sub>	5.0							- uA
	<b>@</b> Ta=125℃		50.0							
Typical junction capacitance(Note1)		CJ	6.0						pF	
Typical thermal resistance(Note2)	Junction to ambient	R <sub>θJA</sub>	62.0 25.0							слw
	Junction to case	R <sub>θJC</sub>								
	Junction to lead	R <sub>eJL</sub>	3.5							
Operating junction and storage temperature range		TJ, TSTG	- 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 ambient,case and lead,  $0.197 \times 0.197$  (5.0×5.0mm) copper pads to each terminal



# **Ratings and Characteristics Curves**



Figure 5. Typical Instantaneous Forward Characteristics





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## **Package Outline Dimensions**

in inches (millimeters)



#### Mounting Pad Layout



### **Packing Information**

7500 pcs/Reel, 18 Reels/Box; 12mm Tape, 13" Reel

#### Tape & Reel Specification



Symbols	SMA(mm)					
W	$12 \pm 0.2$					
Е	1.75 $\pm$ 0.1					
F	5.5 $\pm$ 0.05					
DO	$1.5 \pm 0.1$					
D1	1.50 +0.1/-0					
P0	$4.0 \pm 0.1$					
P1	$4.0 \pm 0.1$					
P2	$2.0\pm 0.05$					
AO	2.65 $\pm$ 0.1					
В0	5.25 $\pm$ 0.1					