

M1 thru M7

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

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





DO-214AC(SMA)

Typical Applications

• 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)									
Parameter	Symbol	M1	M2	М3	M4	M5	М6	M7	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	IF(AV)	1						Α	
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	30.0						A	
Maximum forward voltage at I _F =1.0Amps	V_{F}	1.1					Volts		
Maximum DC reverse @Ta=25°C current at rated DC blocking @Ta=125°C	- I _R	5.0 50.0					uA		
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	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 lead, 0.197×0.197*(5.0×5.0mm)copper pads to each terminal

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Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

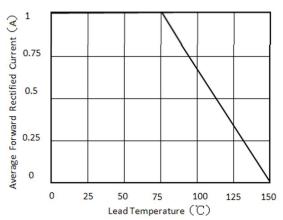


Figure 1. Forward Current Derating Curve

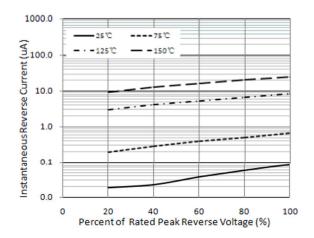


Figure 3. Typical Reverse Characteristics

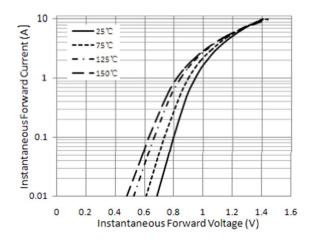


Figure 5. Typical Instantaneous Forward Characteristics

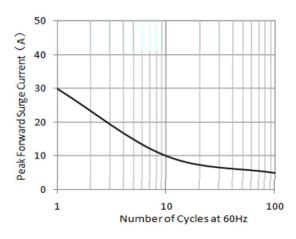


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

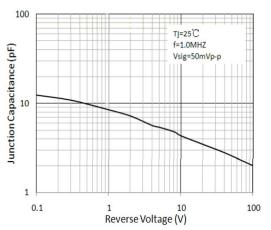


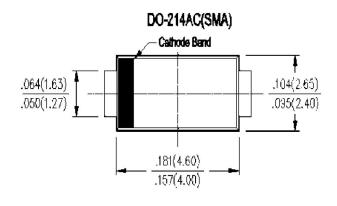
Figure 4. Typical Junction Capacitance

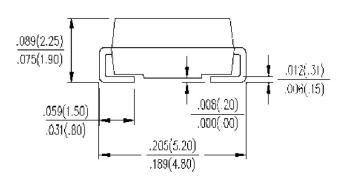
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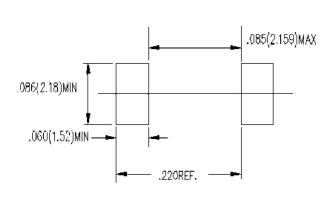
Package Outline Dimensions

in inches (millimeters)





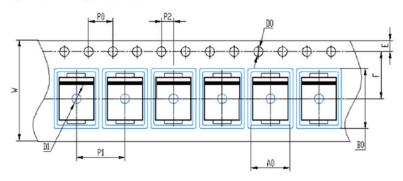
MOUNTING PAD LAYOUT



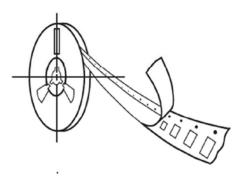
Packing Information

7500 pcs/Reel, 2 Reels/Box; 16mm Tape, 13" Reel

Tape & Reel Specification



Symbo	SMA (mm)
W	12 ± 0.2
E	1. 75 ± 0.1
F	5.5 ± 0.05
DO	1.5 \pm 0.1
D1	1. 50 +0. $1/-0$
P0	4.0 ± 0.1
P1	4.0 ± 0.1
P2	2.0 ± 0.05
AO	2.65 ± 0.1
В0	5. 25 ± 0.1





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