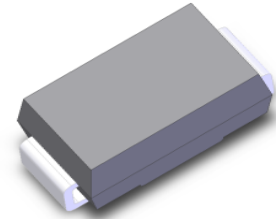


Features

- Glass passivated Fast Recovery rectifiers
- Ideal for automated placement
- Low forward voltage drop
- High current capability
- Low reverse leakage current
- Solder dip 260 °C, 10 s
- Add suffix "E" for Halogen Free



DO-214AC(SMA)

Typical Applications

For use of fast switching rectification in lighting, cellular phone, portable device, power supplies and other consumer applications.

Maximum Ratings (TA = 25 °C unless otherwise noted)										
Parameter	Symbol	GR1A	GR1B	GR1D	GR1G	GR1J	GR1K	GR1M	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)	1.0								A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	30								A
Operating junction and storage temperature range	TJ, TSTG	- 55 to + 150								°C

Electrical Characteristics (TA = 25 °C unless otherwise noted)											
Parameter	Test Conditions	Symbol	GR1A	GR1B	GR1D	GR1G	GR1J	GR1K	GR1M	Unit	
Maximum instantaneous forward voltage	1.0 A	V _F	1.3							Volts	
Maximum DC reverse current at rated DC blocking voltage	TA=25°C TA=125°C	I _R	5 50							µA	
Maximum reverse recovery time	I _F =0.5A, I _R =1.0A, I _{rr} =0.25A	t _{rr}	150				250		500		nS
Typical junction capacitance	4.0 V, 1 MHz	C _J	7.6							pF	
Typical thermal resistance ⁽¹⁾		R _{θJA}	61							°C/W	
		R _{θJC}	30								
		R _{θJL}	6								

Note:1), The thermal resistance from junction to lead, mounted on P.C.B with 5x5mm copper pads, 2 OZ, FR4 PCB

Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

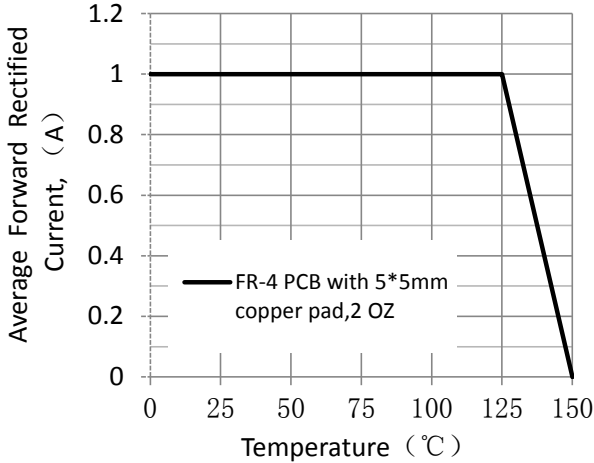


Figure 1. Forward Current Derating Curve

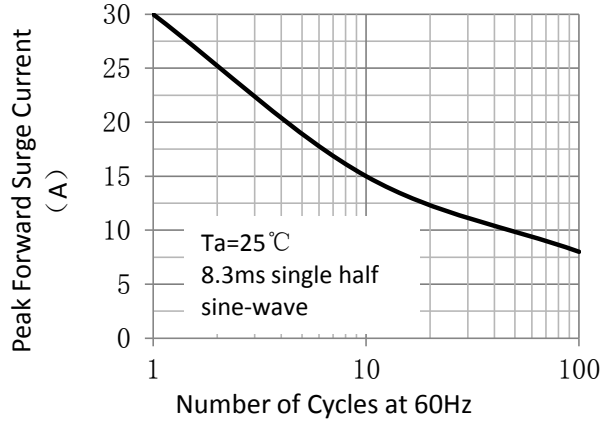


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

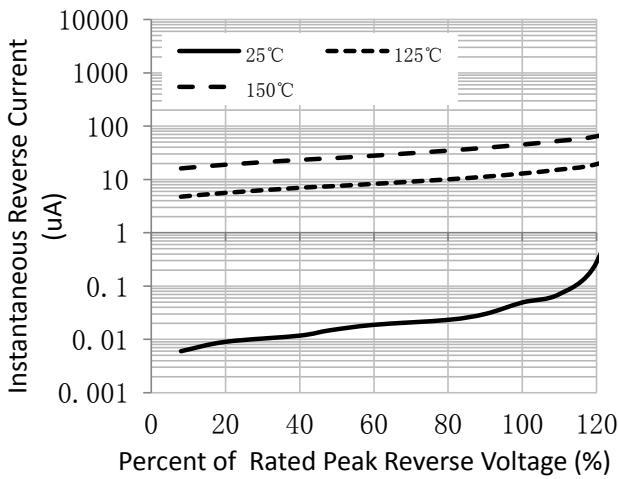


Figure 3. Typical Reverse Characteristics

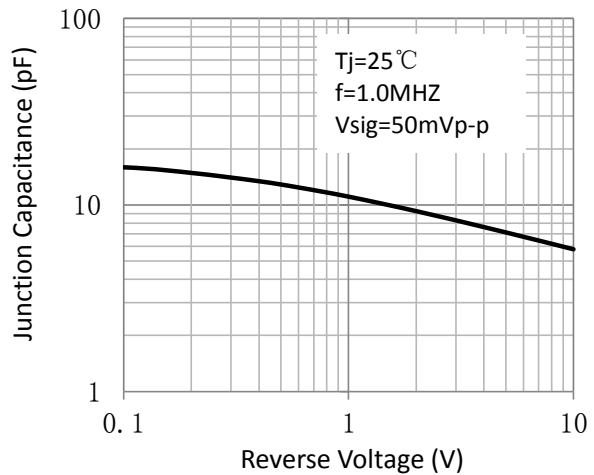


Figure 4. Typical Junction Capacitance

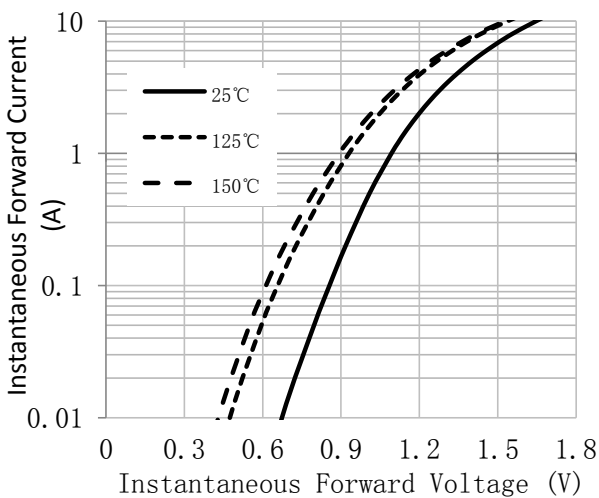
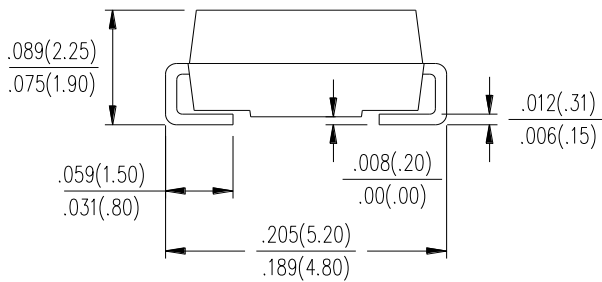
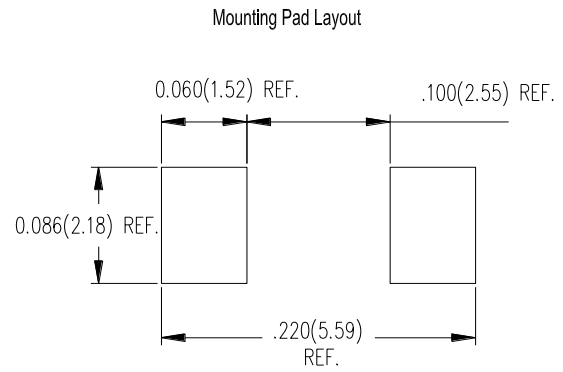
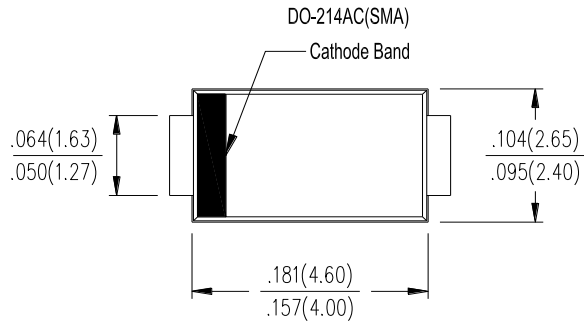


Figure 5. Typical Instantaneous Forward Characteristics

Package Outline Dimensions

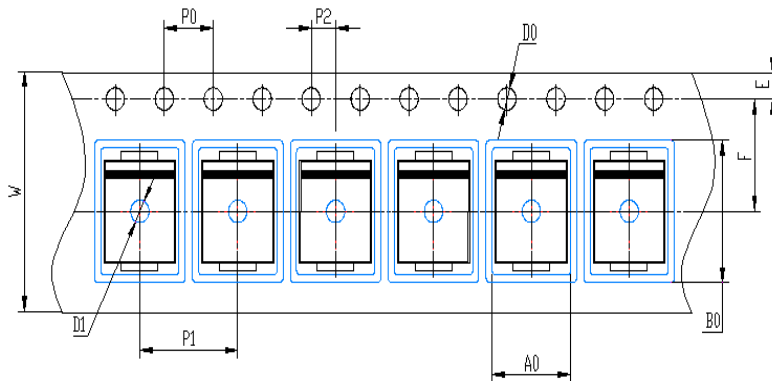
in inches (millimeters)



Packing Information

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

Tape & Reel Specification



Symbols	SMA(mm)
W	12 ± 0.2
E	1.75 ± 0.1
F	5.5 ± 0.05
D0	1.5 ± 0.1
D1	1.50 +0.1/-0
P0	4.0 ± 0.1
P1	4.0 ± 0.1
P2	2.0 ± 0.05
A0	2.65 ± 0.1
B0	5.25 ± 0.1



GR1A thru GR1M

Surface Mount Glass Passivated Fast Recovery Rectifier
Reverse Voltage 50~1000V Forward Current 1.0A

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