



RS12005FL thru RS1210FL

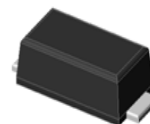
Surface Mount Glass Passivated Fast Recovery Rectifier
Reverse Voltage 50~1000V Forward Current 1.2A

Features

- Glass passivated Fast Recovery rectifiers
- Very low profile - typical height of 1.0 mm
- Low forward voltage drop
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- AEC-Q101 qualified
- High temperature soldering guaranteed: 260 °C/10 seconds
- Halogen-free according to IEC 61249-2-21 definition



RoHS
COMPLIANT



eSGA
(SOD-123FL)

Typical Applications

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

Maximum Ratings (TA = 25 °C unless otherwise noted)									
Parameter	Symbol	RS1200 5FL	RS1201 FL	RS1202 FL	RS1204 FL	RS1206 FL	RS1208 FL	RS1210 FL	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)	1.2							A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	50							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	RS1200 5FL	RS1201 FL	RS1202 FL	RS1204 FL	RS1206 FL	RS1208 FL	RS1210 FL	Unit
Maximum instantaneous forward voltage	1 .2A	V _F	1.3							Volts
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	I _R	5							µA
	TA=125°C		50							
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	7.5							pF
Typical thermal resistance ¹⁾	junction to mount	R _{θJM}	3.3							°C/W
	junction to ambient	R _{θJA}	67							
	junction to case	R _{θJC}	25							

Note1): Mounted on PCB with 5.0x5.0mm copper pads, 2 OZ, FR4 PCB;



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Ratings and Characteristics Curves

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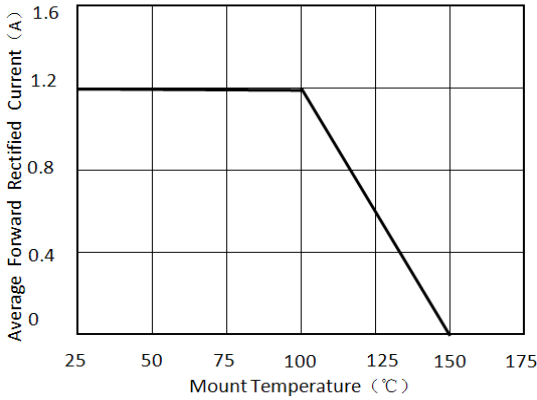


Figure 1. Forward Current Derating Curve

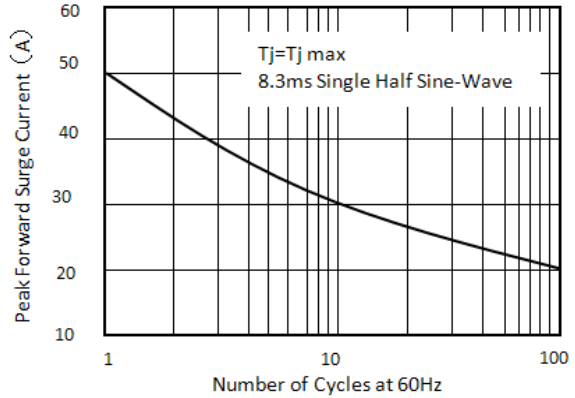


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

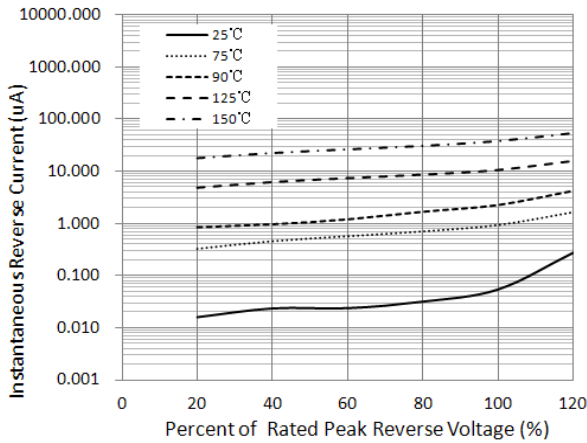


Figure 3. Typical Reverse Characteristics

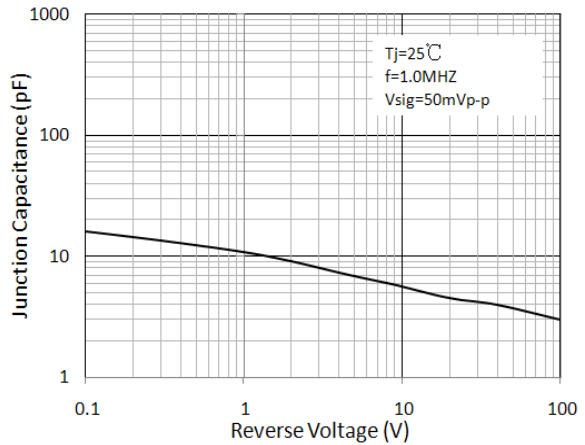


Figure 4. Typical Junction Capacitance

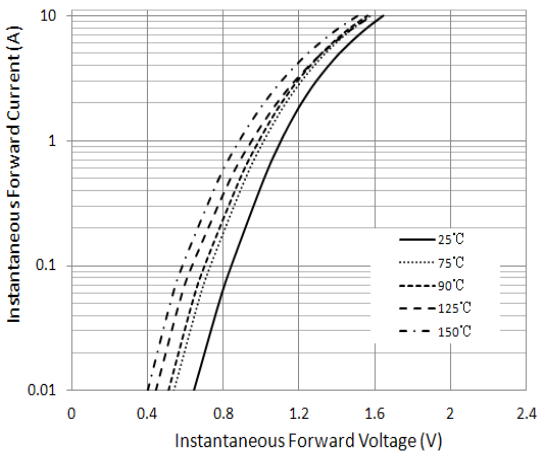


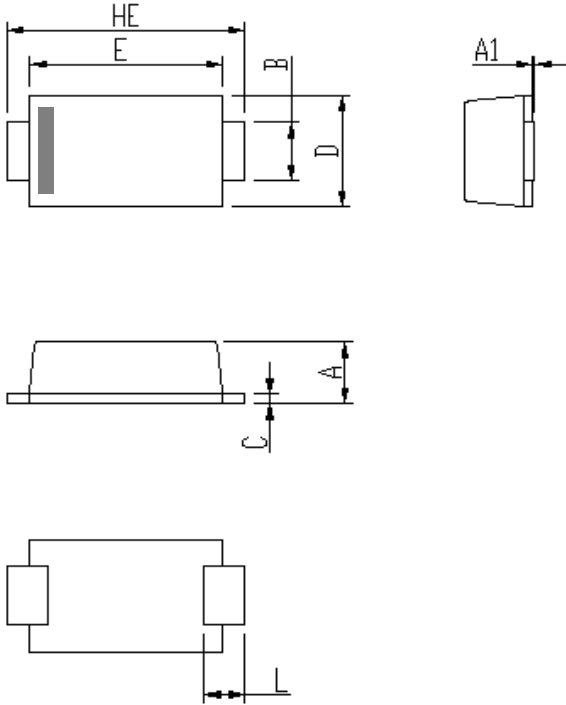
Figure 5. Typical Instantaneous Forward Characteristics



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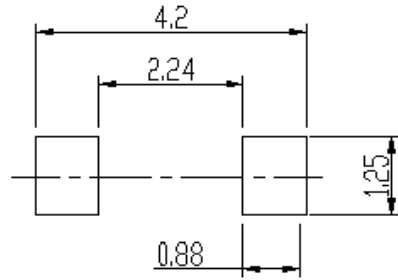
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Package Outline Dimensions



DIM	Unit: mm		Unit: inch	
	MIN	MAX	MIN	MAX
A	0.9	1.08	0.035	0.043
A1	0	0.1	0.000	0.004
B	0.85	1.05	0.033	0.041
C	0.1	0.25	0.004	0.010
D	1.7	2	0.067	0.079
E	2.9	3.1	0.114	0.122
L	0.43	0.83	0.017	0.033
HE	3.5	3.9	0.138	0.154

Soldering footprint

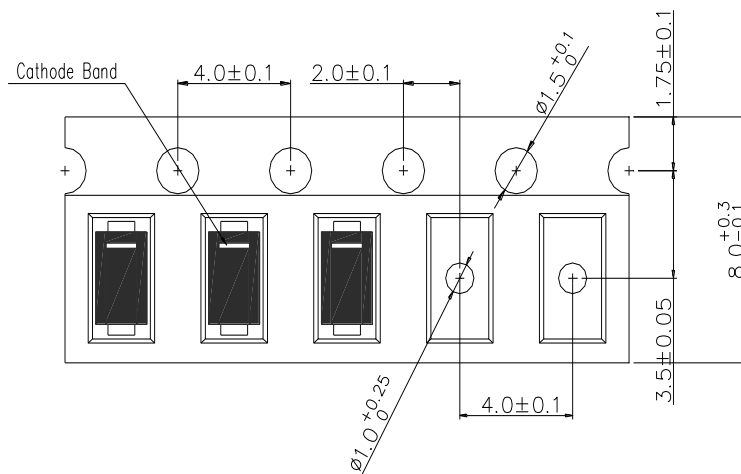


Packing Information

Packing quantities:

3000 pcs/Reel, 40 Reels/Box; 8mm Tape, 7" Reel

Tape & Reel Specification





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