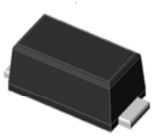
RS12005FL thru RS1210FL

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℃/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	RS12005FL	RS1201FL	RS1202FL	RS1204FL	RS1206FL	RS1208FL	RS1210FL	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	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	RS12005FL	RS1201FL	RS1202FL	RS1204FL	RS1206FL	RS1208FL	RS1210FL	Unit
Maximum instantaneous forward voltage	1 .2A	V_F	1.3							Volts
Maximum DC reverse current at rated DC blocking voltage	TA=25℃ TA=125℃	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	7.5							pF
Typical thermal resistance[1)]	juntion to mount	$R_{\theta JM}$	3.3							℃/W
	juntion to ambient	$R_{\theta JA}$	67							
	juntion to case	$R_{\theta JC}$	25							

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

Ratings and Characteristics Curves

(TA = 25℃ unless otherwise noted)

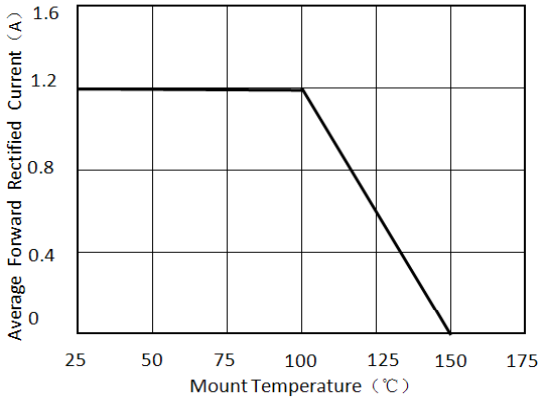


Figure 1.Forward Current Derating Curve

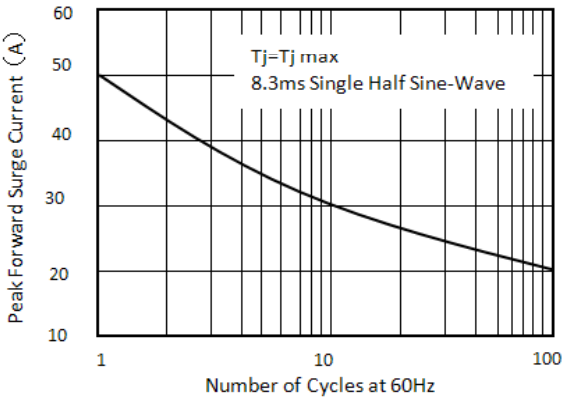


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

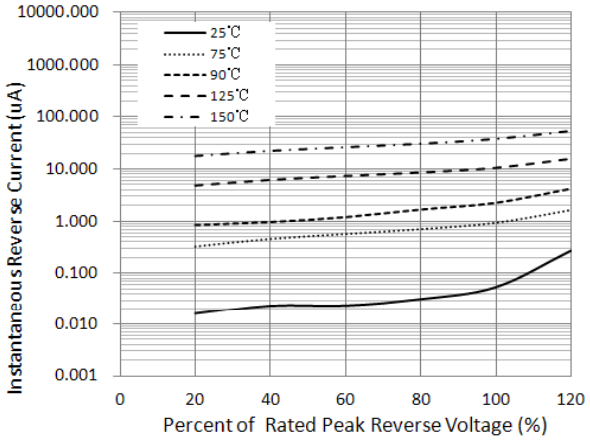


Figure 3. Typical Reverse Characteristics

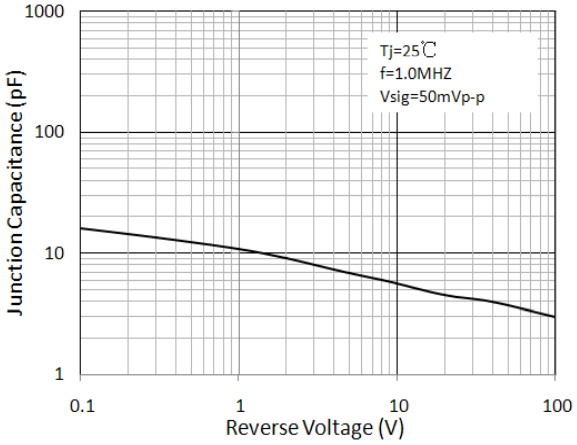


Figure 4. Typical Junction Capacitance

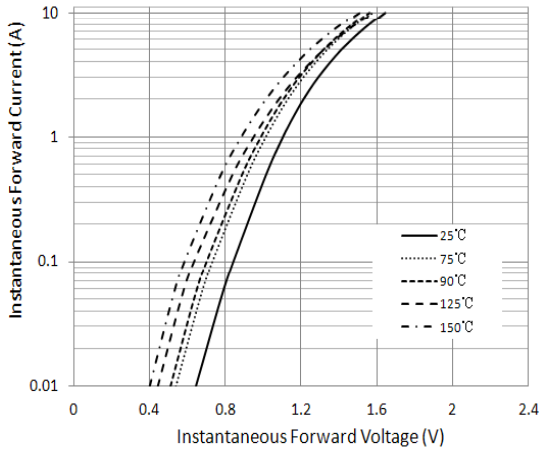


Figure 5. Typical Instantaneous Forward Characteristics

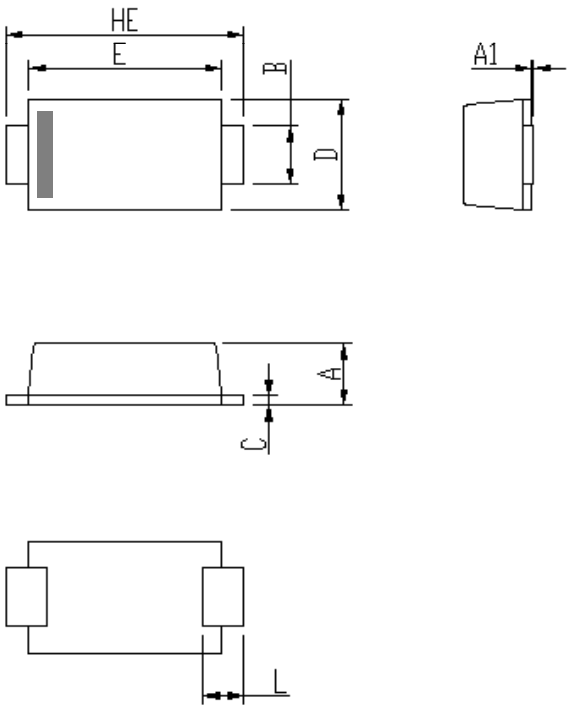
RS12005FL thru RS1210FL

Surface Mount Glass Passivated Fast Recovery Rectifier

Reverse Voltage 50~1000V Forward Current 1.2A

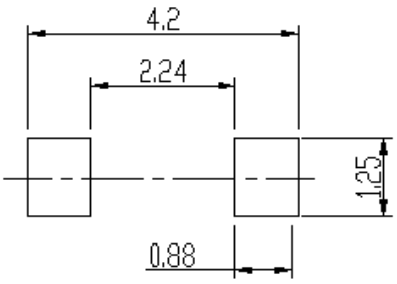
Package Outline Dimensions

in inches (millimeters)



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

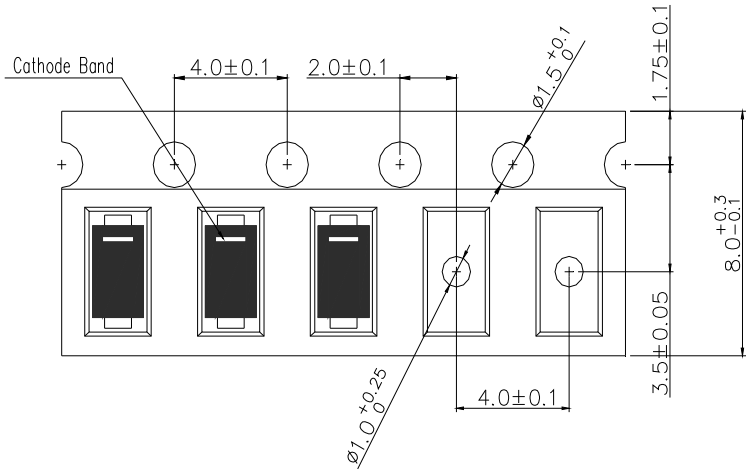


Packing Information

Packing quantities:

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

Tape & Reel Specification



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