

RS1002FL-AU~RS1010FL-AU

SMALL SURFACE MOUNT FAST DIODES

VOLTAGE 200 to 1000 Volt **CURRENT** 1 Ampere

FEATURES

- For surface mounted applications in order to optimize board space
- Ideal for automated placement
- Glass Passivated Chip Junction
- High temperature soldering : 260°C / 10 seconds at terminals
- Ultra thin profile package for space constrained utilization
- AEC-Q101 qualified
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

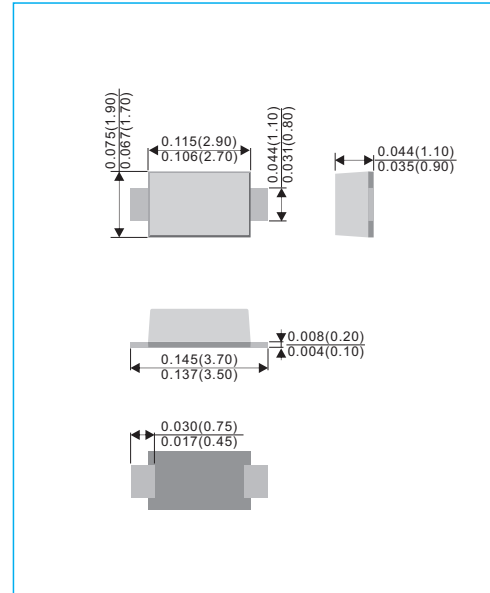
MECHANICAL DATA

- Case : JEDEC SOD-123FL, Molded plastic over passivated junction
- Terminals : Solderable per MIL-STD-750, Method 2026
- Standard Packaging : 8mm tape (EIA-481)
- Apporx. Weight : 0.0006 ounces, 0.0173 grams
- Polarity : Color band denotes cathode end



SOD-123FL

Unit : inch(mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Rating	Test condition	Symbol	RS1002FL-AU	RS1006FL-AU	RS1008FL-AU	RS1010FL-AU	Units
Marking code		-	R1D	R1J	R1K	R1M	-
Maximum repetitive peak reverse voltage		V _{RRM}	200	600	800	1000	V
Maximum rms voltage		V _{RMS}	140	420	560	700	V
Maximum dc blocking voltage		V _{DC}	200	600	800	1000	V
Maximum average forward rectified current Derate above T _C =110°C		I _{F(AV)}	1				A
Maximum instantaneous forward voltage	0.7A 1A	V _F	1.15 1.3				V
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load		I _{FSM}	30				A
Maximum dc reverse current at rated dc blocking voltage	T _J =25°C T _J =125°C	I _R	1 50				μA
Typical capacitance	4V,1MHz	C _J	9				pF
Reverse recovery time	I _F =0.5A I _R =-1A I _{rr} =-0.25A	t _{rr}	150	250	500		nS
Typical thermal resistance junction to ambient (Note1)		R _{θJA}	200				°C/W
Operating junction and storage temperature range		T _J , T _{STG}	-55 to +150				°C

Note: 1. Mounted on a FR4 PCB, single-sided copper, mini pad.

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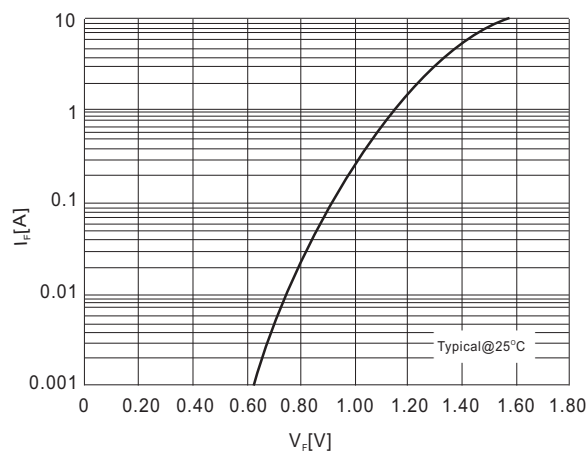


Fig.1-TYPICAL FORWARD CHARACTERISTICS

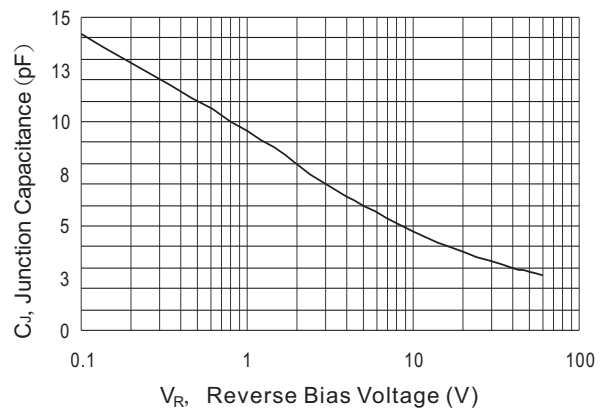


Fig.2-TYPICAL JUNCTION CAPACITANCE

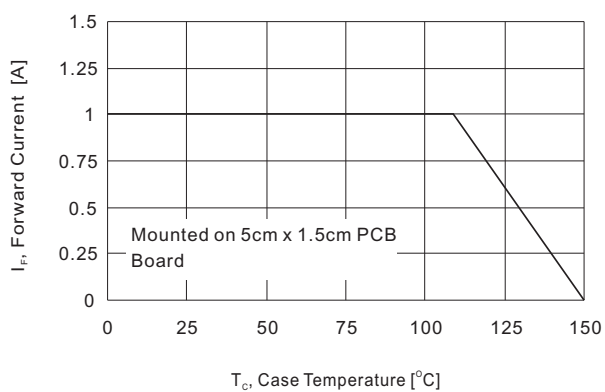


Fig.3-FORWARD CURRENT DERATING CURVE

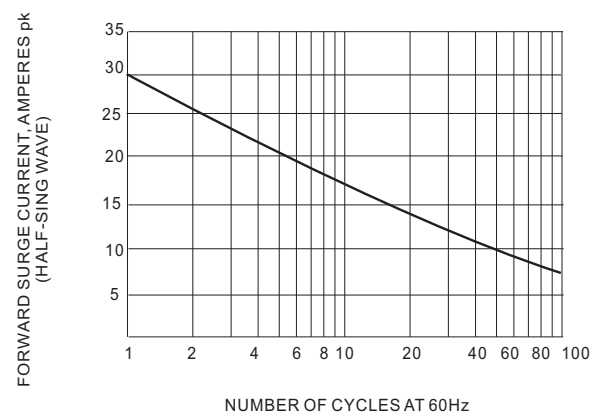


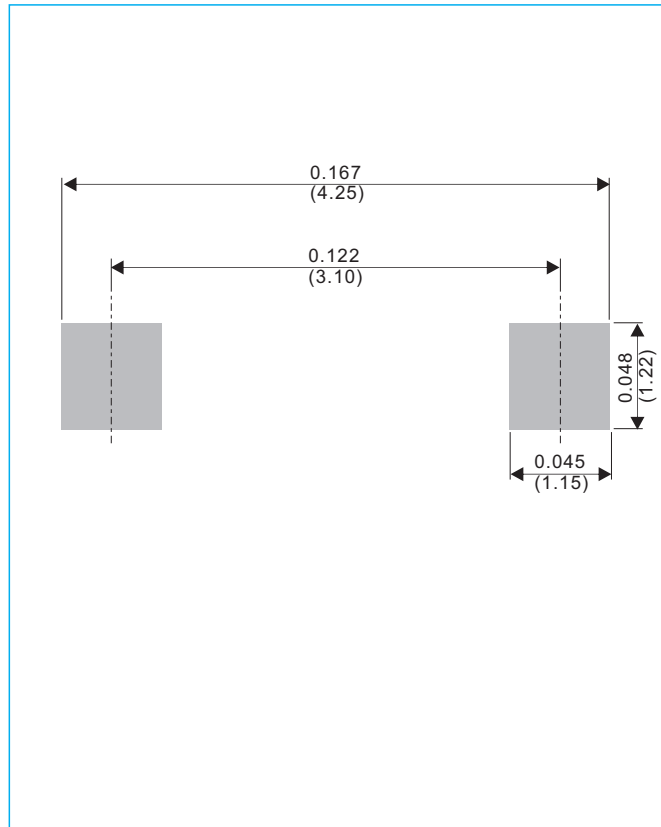
Fig.4-MAXIMUM NON-REPEITIVE SURGE CURRENT

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MOUNTING PAD LAYOUT

SOD-123FL

Unit : inch(mm)



ORDER INFORMATION

- Packing information
 - T/R - 10K per 13" plastic Reel
 - T/R - 3K per 7" plastic Reel

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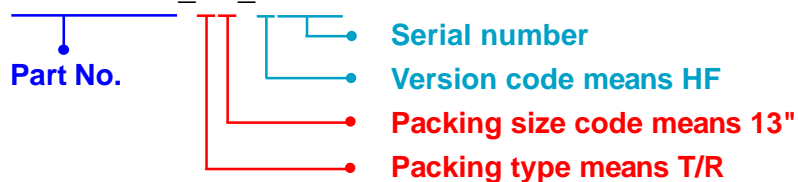
Part No_packing code_Version

RS1002FL-AU_R1_000A1

RS1002FL-AU_R2_000A1

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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