

Descriptions

This is Surface Mount Fast Recovery Rectifiers, Reverse Voltage: 50 to 1000V, Forward Current: 1.0A, SOD-123FL thin package.

Features

Glass Passivated Chip Junction, Fast reverse recovery time, Lead free in comply with EU ROHS 2011/65/EU directives, For surface mounted applications. Halogen free product.

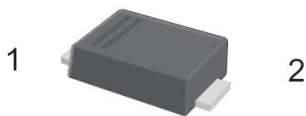
Applications

General purpose.

Equivalent Circuit

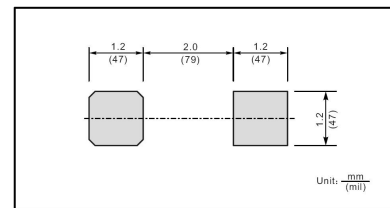


Pinning



PIN	DESCRIPTION
1	Cathode
2	Anode

The recommended mounting pad size



Marking

Type number	FR101W	FR102E	FR103W	FR104W	FR105W	FR106W	FR107W
Marking code	F2			F5	F7		

Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Rating							Unit
		FR101W	FR102W	FR103W	FR104W	FR105W	FR106W	FR107W	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at T _a = 65°C	I _{F(AV)}	1.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	30							A
Typical Junction Capacitance at V _R =4V,f=1MH	C _j	15							pF
Typical Thermal Resistance ¹⁾	R _{θJA}	120							°C/W
Operating and Storage Temperature Range	T _j ,T _{stg}	-55~+150							°C

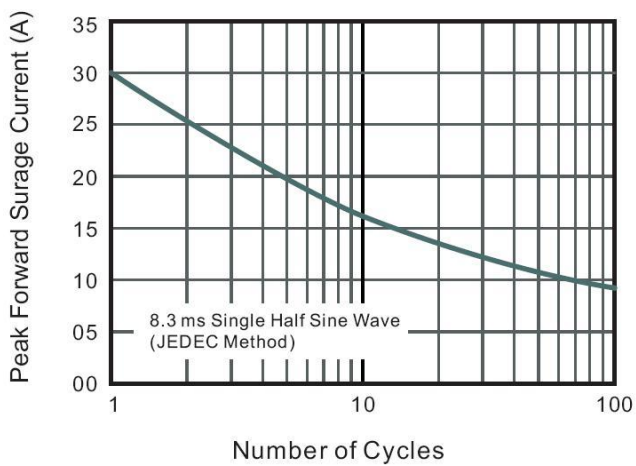
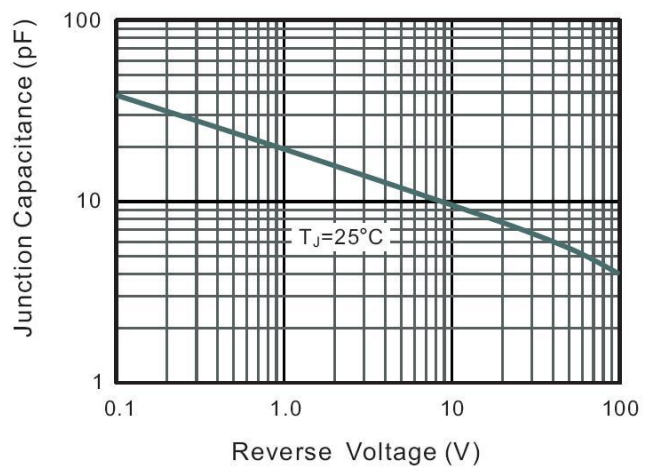
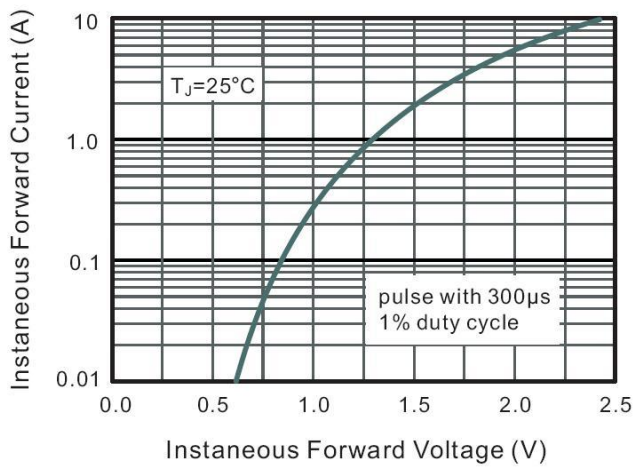
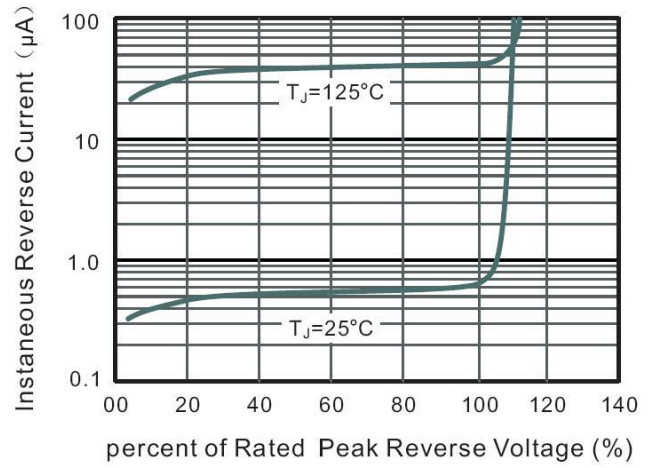
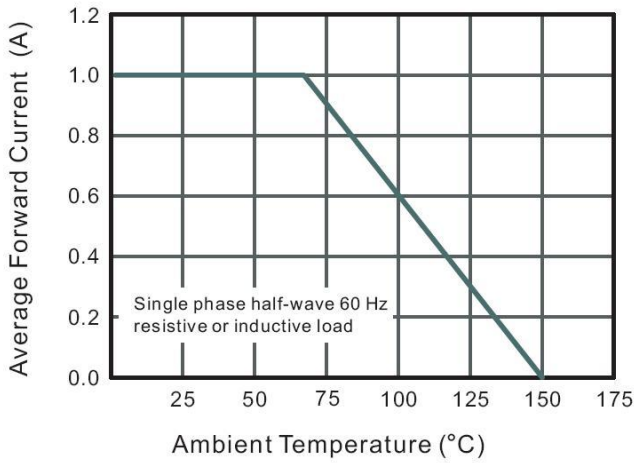
Note:

1) P.C.B. mounted with 0.2X0.2"(5X5mm) copper pad areas.

Electrical Characteristics(Ta=25°C)

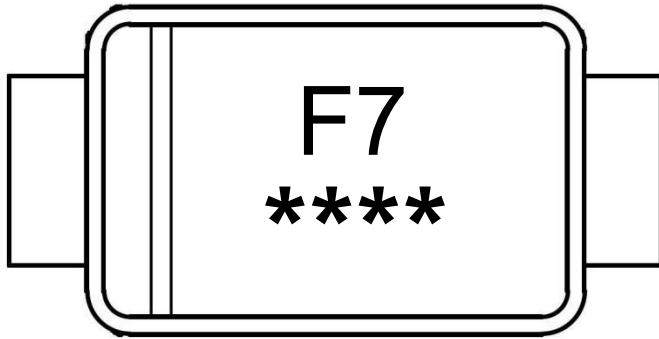
Parameter	Symbol	Test Conditions	Rating							Unit
			FR101W	FR102W	FR103W	FR104W	FR105W	FR106W	FR107W	
Maximum Instantaneous Forward Voltage	V _F	I _F =1.0A	1.3							V
Maximum DC Reverse Current at Maximum DC Blocking Voltage	I _R	T _a =25°C	5.0							μA
		T _a =125°C	50							μA
Maximum Reverse Recovery Time	t _{rr}	I _F =0.5A I _R =1A I _{rr} =0.25A	150			250	500		ns	

Electrical Characteristic Curve



Marking Instructions

Marking



Type number	Marking code
FR101W	F2
FR102W	
FR103W	
FR104W	
FR105W	F5
FR106W	F7
FR107W	

Note:

F7: Product Type Code

****: Lot No. Code, The 1st "*" means:YM Code, The last 3 "*" means:little Lot No Code

Packaging SPEC

REEL

Package Type	Units					Dimension (unit: mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SOD-123FL	3000	8	24000	5	120000	7" ×11	185X180X105	390X385X205

Package Outline Dimensions

SOD-123FL

