1N4001W~1N4007W

Rev.F May.-2024

DATA SHEET

/ Descriptions

SOD-123FL

Surface Mount General Purpose Silicon Rectifiers Reverse Voltage 50 to1000V Forward Current 1.0A SOD-123FL thin package.

/ Features

, RoHS 2011/65/EU

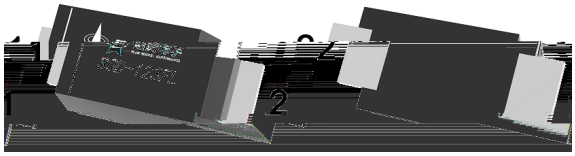
Glass Passivated Chip Junction Ideal for automated placement Lead free in comply with EU RoHS 2011/65/EU directives For surface mounted applications,HF Product.

/ Applications

General purpose.

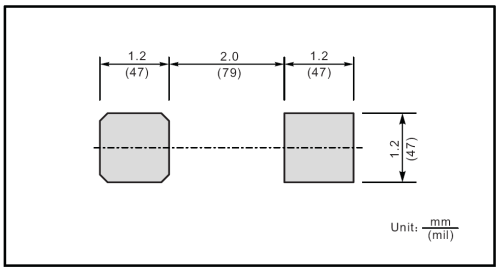
/ Equivalent Circuit

/ Pinning



PIN	DESCRIPTION
1	Cathode
2	Anode

The recommended mounting pad size



/ Marking

See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating							Unit
		1N4001W	1N4002W	1N4003W	1N4004W	1N4005W	1N4006W	1N4007W	
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	$I_{F\ AV}$	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 [1]	C_j	8							pF
Typical Thermal Resistance[2)]	$R_{\theta JA}$	90							/W
Operating and Storage Temperature Range	T_j,T_{stg}	-55~+150							

Note:

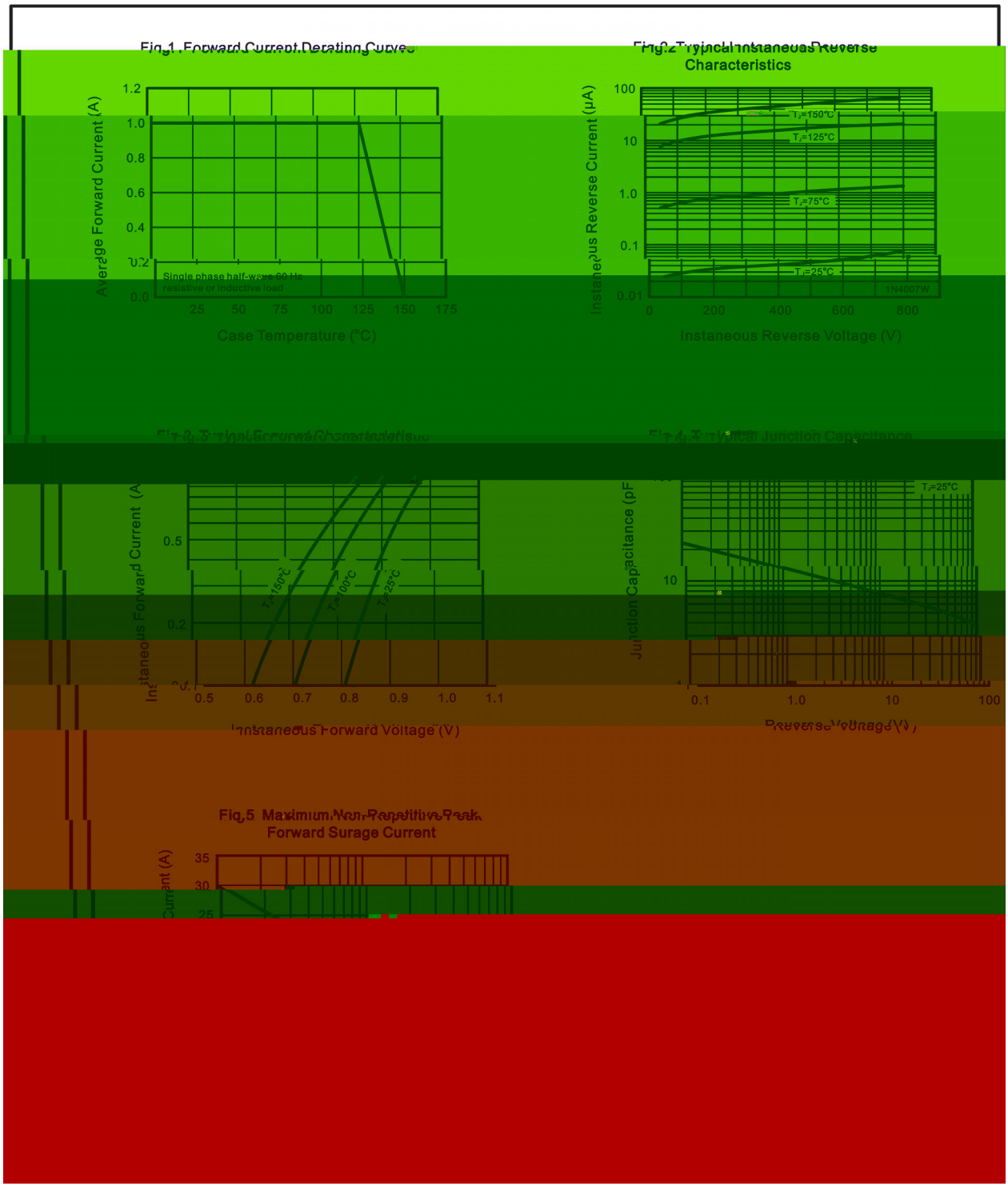
1)Measured with IF=0.5A,IR=1A,Irr=0.25A.

2)P.C.B. mounted with0.2X0.2"(5X5mm) copper pad areas.

/ Electrical Characteristics(Ta=25)

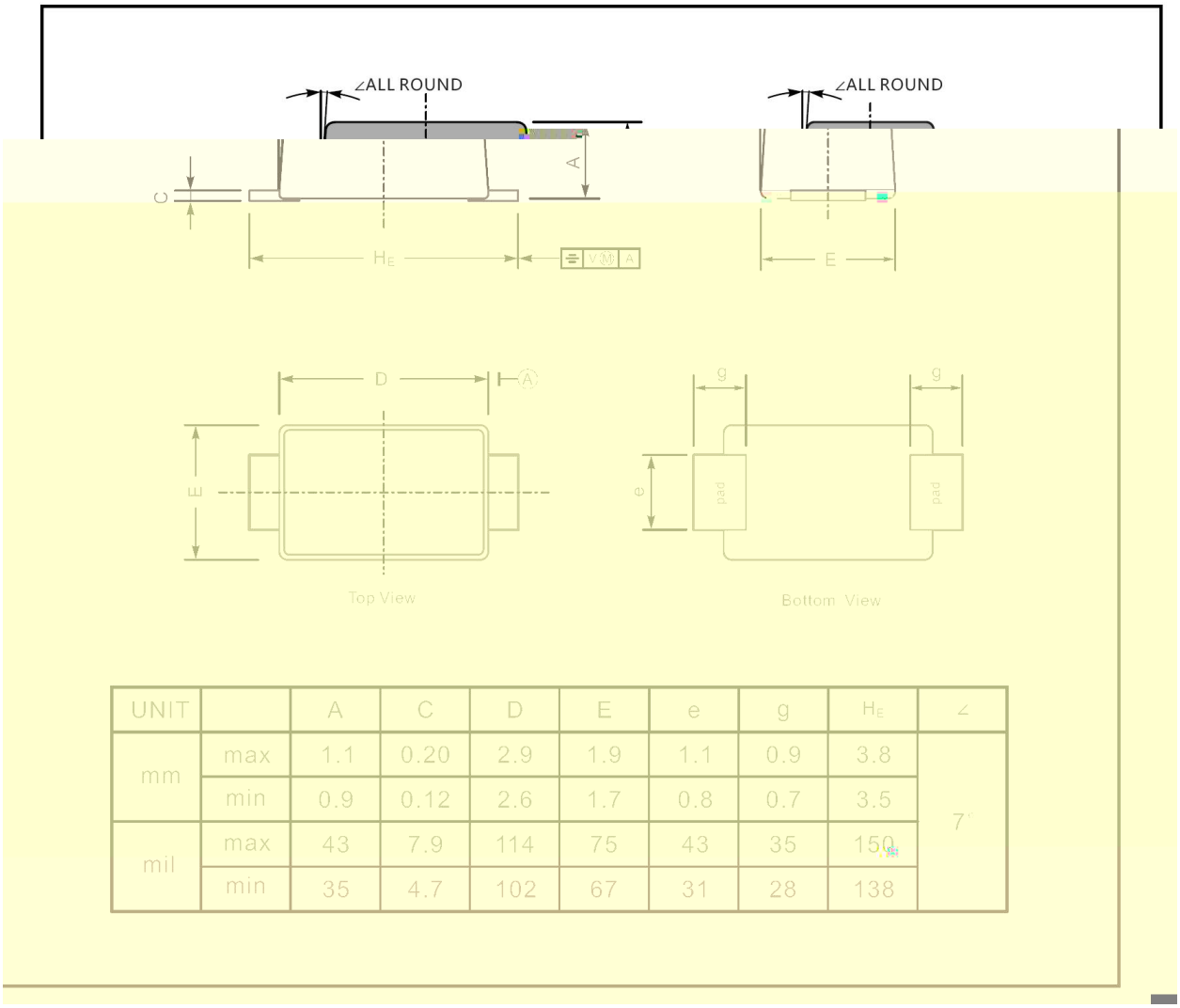
Parameter	Symbol	Test Conditions	Rating							Unit
			1N4001W	1N4002W	1N4003W	1N4004W	1N4005W	1N4006W	1N4007W	
Maximum Instantaneous Forward Voltage	V_F	I_F=1.0A	1.1							V
Maximum DC Reverse Current at Maximum DC Blocking Voltage	I_R	T_a=25	5.0							μA
		T_a=125	50							μA

/ Electrical Characteristic Curve



/ Package Dimensions

SOD-123FL



UNIT		A	C	D	E	e	g	H_E	∠
mm	max	1.1	0.20	2.9	1.9	1.1	0.9	3.8	7°
	min	0.9	0.12	2.6	1.7	0.8	0.7	3.5	
mil	max	43	7.9	114	75	43	35	150	
	min	35	4.7	102	67	31	28	138	

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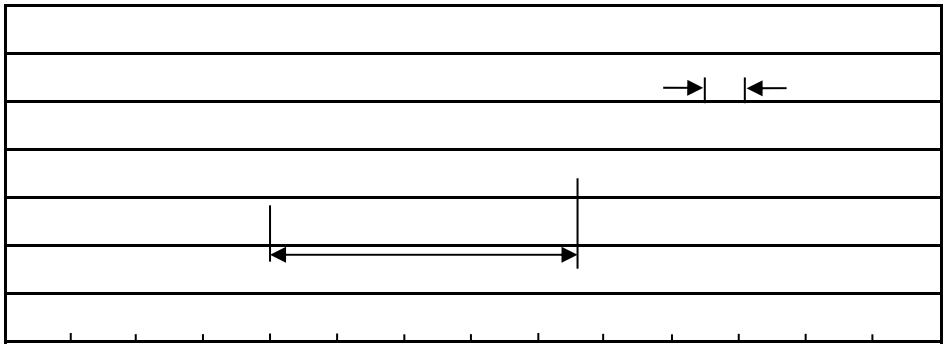

Note:

1 150 180 60 90sec;	1.Preheating:150~180 , Time:60~90sec.
2 245 5 5 0.5sec;	2.Peak Temp.:245 5 , Duration:5 0.5sec.
3 2 10 /sec.	3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

260 5 10 1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension		(unit mm³)
SOD-123FL	3,000	8	24,000	6	144,000	7 ×8	185×180×105	390×385×205

/ Notices