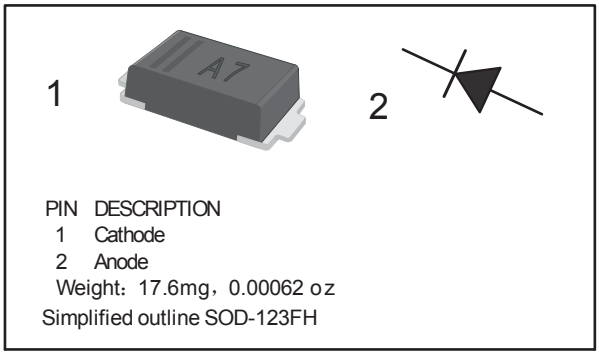
General Purpose Silion Rectifiers

1N4001FH ~ 1N4007FH

■ Features

- Surface Mount General Purpose Silicon Rectifiers
- Reverse Voltage - 50 to 1000 V
- Forward Current: 1 A



PIN DESCRIPTION
1 Cathode
2 Anode
Weight：17.6mg，0.00062 oz
Simplified outline SOD-123FH

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	1N4001FH	1N4002FH	1N4003FH	1N4004FH	1N4005FH	1N4006FH	1N4007FH	Unit
Repetitive Peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Surge Peak reverse voltage	V_{RSM}	35	70	140	280	420	560	700	
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	
Forward voltage @I_F=1A	V_F	1.1							
Max.averaged fwd.current. @Ta=65℃	I_{FAV}	1							A
Peak forward surge current	I_{FSM}	25							
Maximum DC Reverse Current Ta=25℃	I_R	5							μA
Ta=125℃		100							
Typical Junction Capacitance *1	Cj	4							pF
Thermal Resistance Junction to Ambient *2	$R_{\theta JA}$	180							℃/W
Junction temperature	Tj	150							℃
Storage temperature	Tstg	-55 to 150							

* 1 Measured at 1 MHz and applied reverse voltage of 4 V D.C

* 2 Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length, P.C.B. mounted

■ Marking

NO.	1N4001FH	1N4002FH	1N4003FH	1N4004FH	1N4005FH	1N4006FH	1N4007FH
Marking	A1	A2	A3	A4	A5	A6	A7

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■ Typical Characterisitics

Fig.1 Forward Current Derating Curve

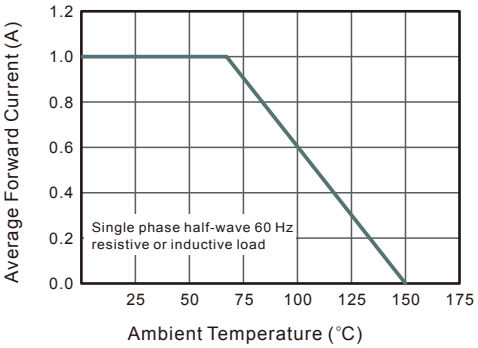


Fig.2 Typical Instaneous Reverse Characteristics

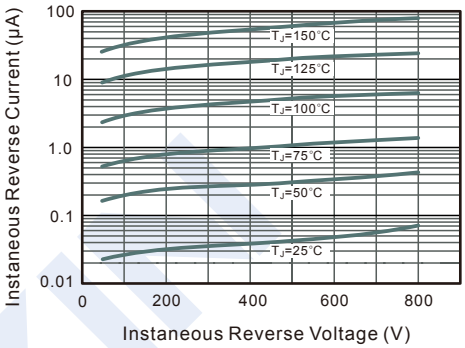


Fig.3 Typical Forward Characteristic

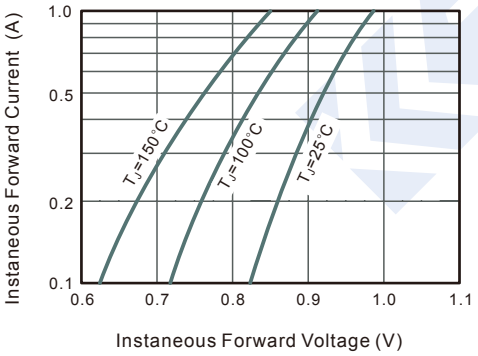
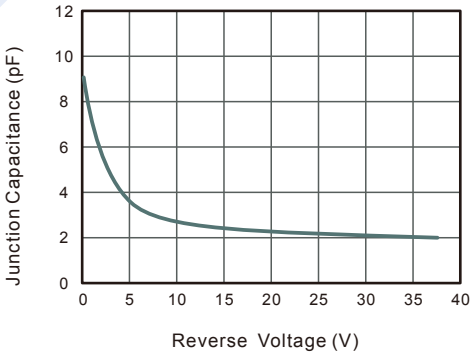


Fig.4 Typical Junction Capacitance



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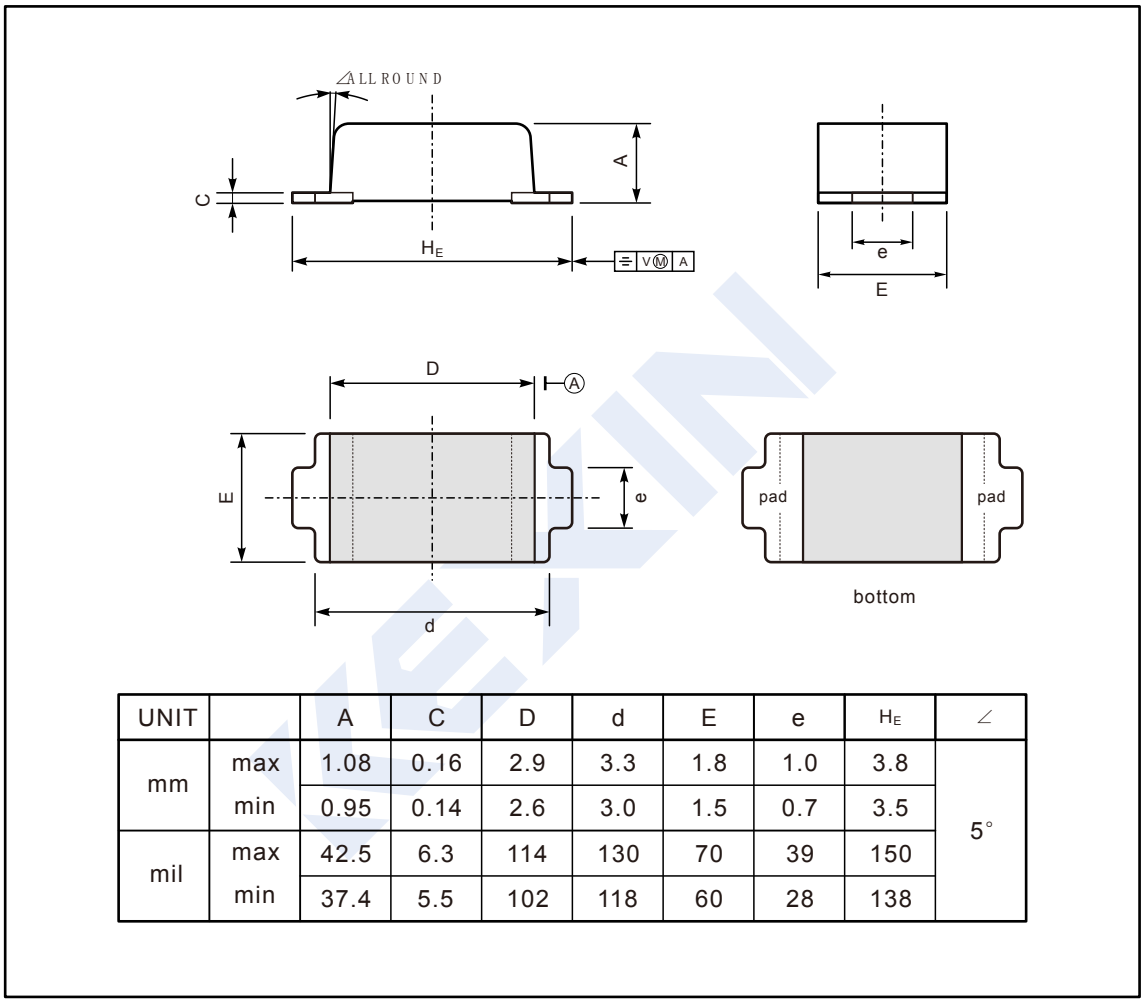
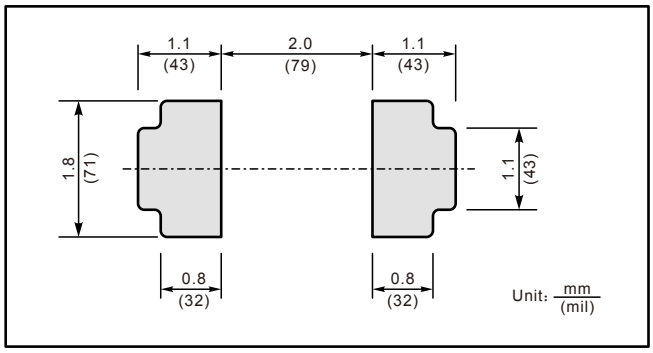
■ Typical Application

Plastic surface mounted package; 2 leads



UNIT		A	C	D	d	E	e	H_E	∠
mm	max	1.08	0.16	2.9	3.3	1.8	1.0	3.8	5°
	min	0.95	0.14	2.6	3.0	1.5	0.7	3.5	
mil	max	42.5	6.3	114	130	70	39	150	
	min	37.4	5.5	102	118	60	28	138	



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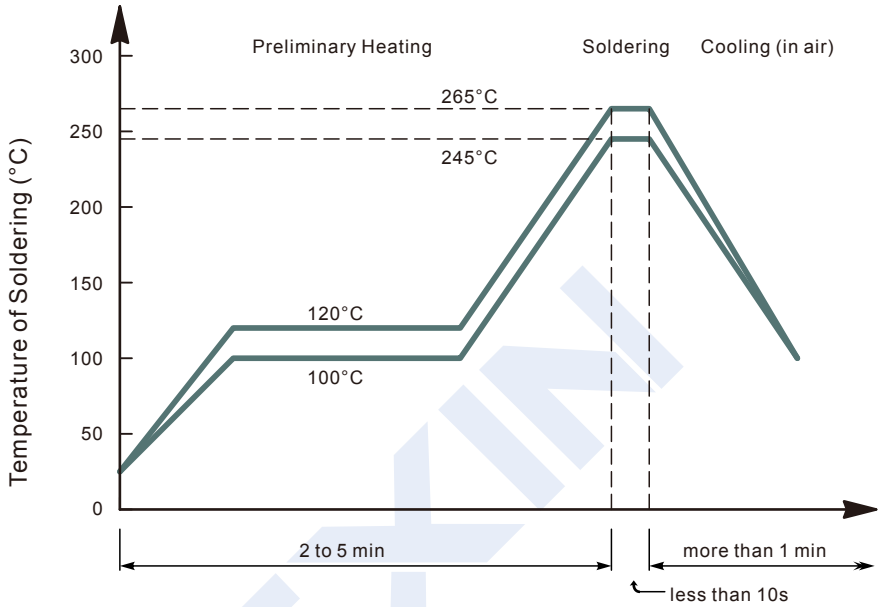
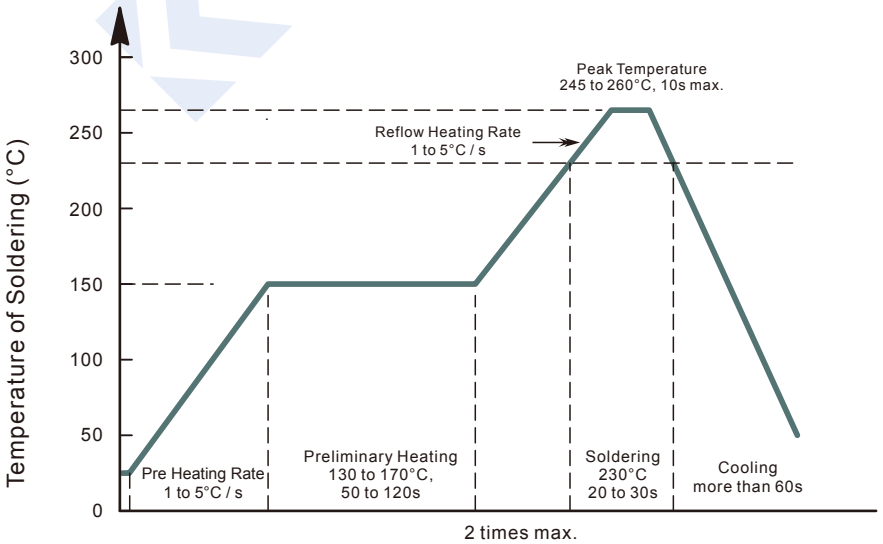
■ Typical Application

Recommended condition of flow soldering



Recommended condition of reflow soldering



Recommended peak temperature is over 245 °C. If peak temperature is below 245 °C, you may adjust the following parameters; time length of peak temperature (longer), time length of soldering (longer), thickness of solder paste (thicker)