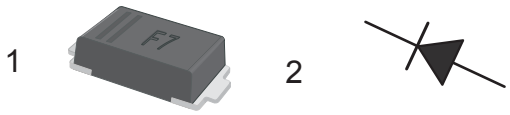
Fast Recovery Rectifiers

FR101FH~FR107FH

■ Features

- Surface Mount Fast Recovery 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	FR101FH	FR102FH	FR103FH	FR104FH	FR105FH	FR106FH	FR107FH	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	1.3							
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							
Maximum Reverse Current *1	trr	150				250	500		ns
Typical Junction Capacitance *2	Cj	15							pF
Junction temperature	Tj	150							℃
Storage temperature	Tstg	-55 to 150							

* 1 Measured with IF = 0.5 A, IR = 1 A, Irr = 0.25 A

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

■ Marking

NO.	FR101FH	FR102FH	FR103FH	FR104FH	FR105FH	FR106FH	FR107FH
Marking	F2				F3	F7	

Fast Recovery Rectifiers

FR101FH~FR107FH

■ Typical Characterisitics

Fig.1 Forward Current Derating Curve

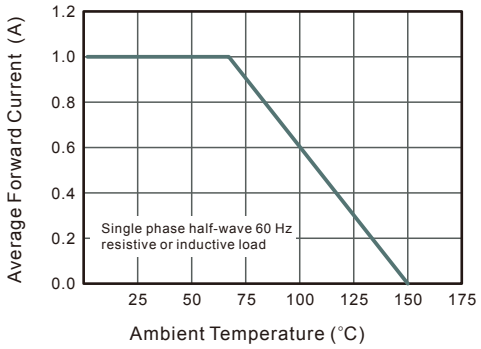


Fig.2 Typical Reverse Characteristics

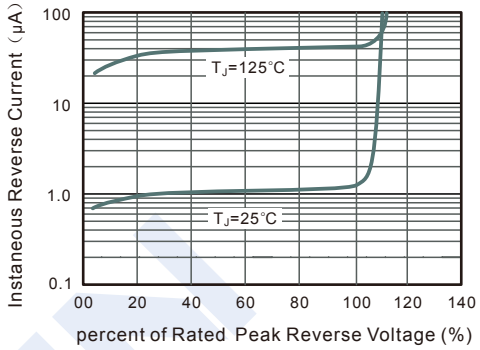


Fig.3 Typical Instaneous Forward Characteristics

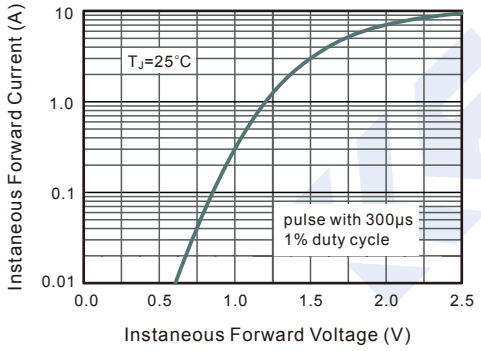


Fig.4 Typical Junction Capacitance

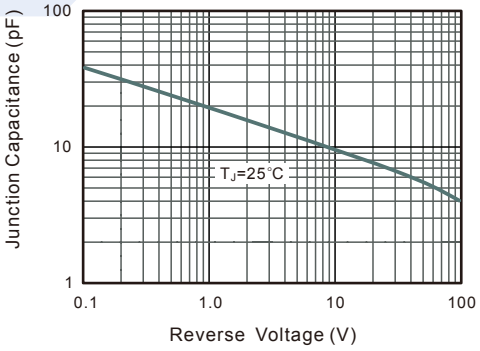
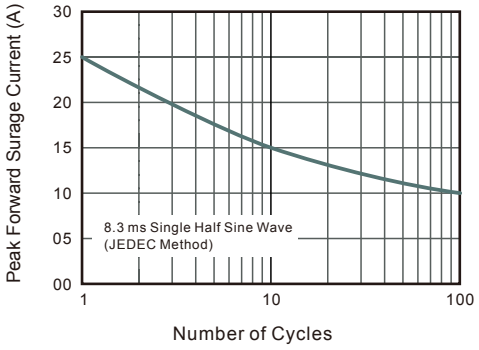


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

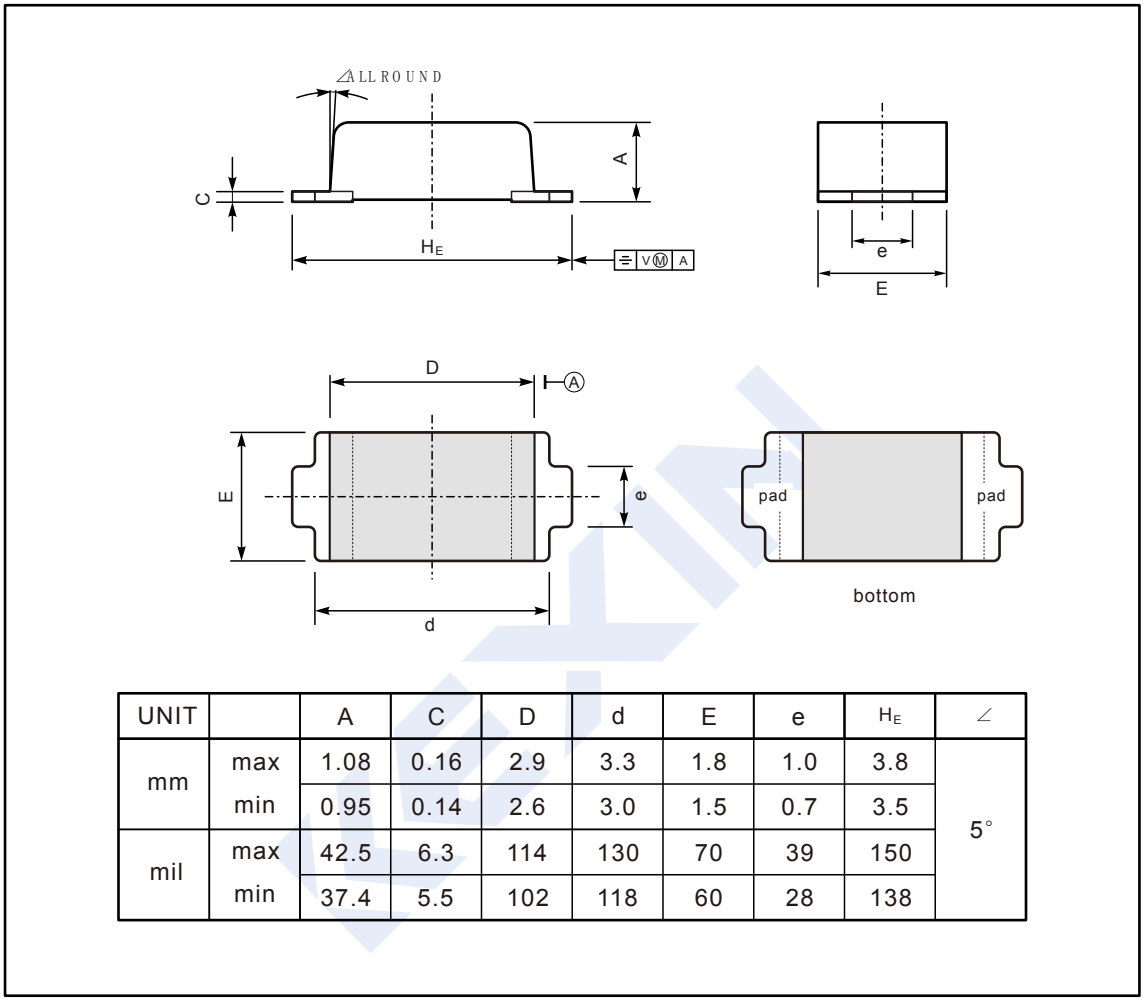


Fast Recovery Rectifiers

FR101FH~FR107FH

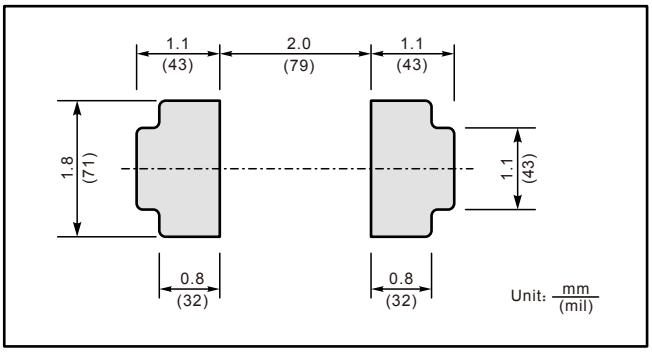
■ Typical Applicatior

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	

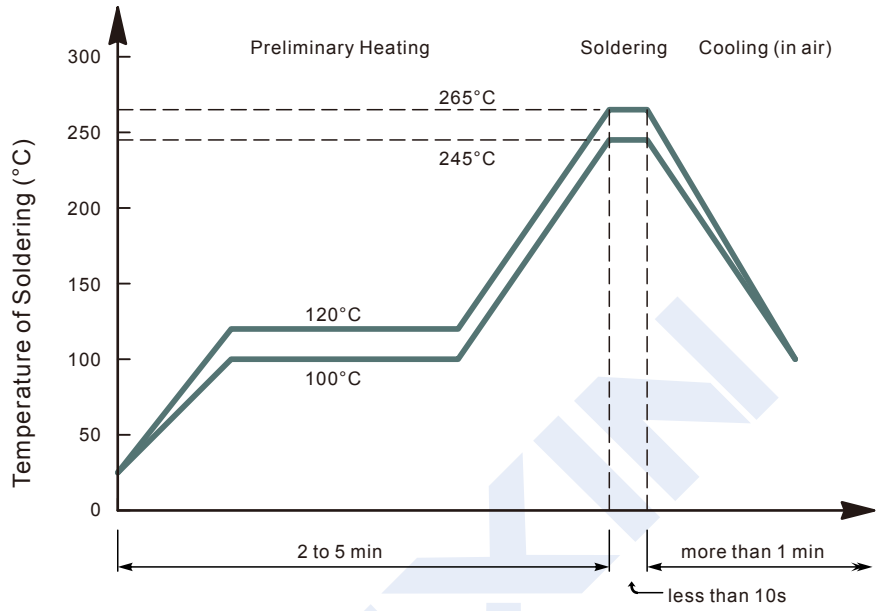
The recommended mounting pad size



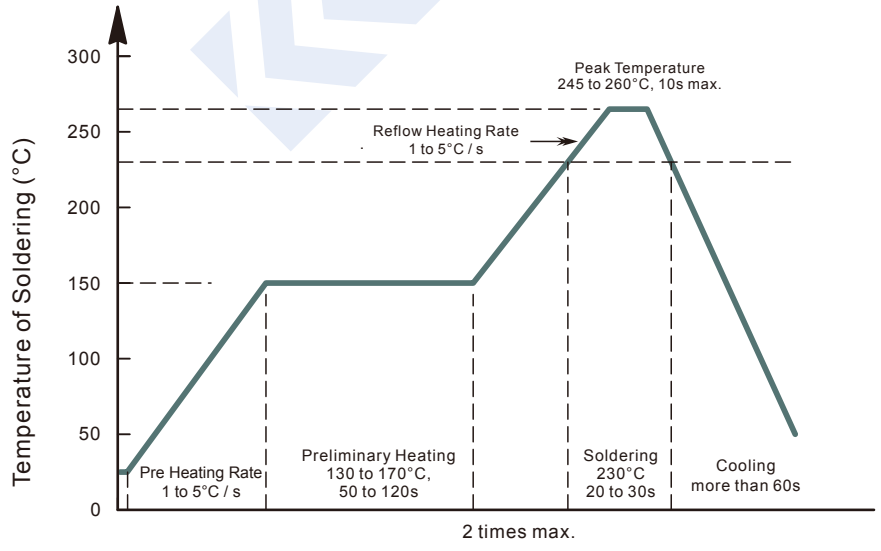
Fast Recovery Rectifiers
FR101FH~FR107FH

■ Typical Applicatio

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)