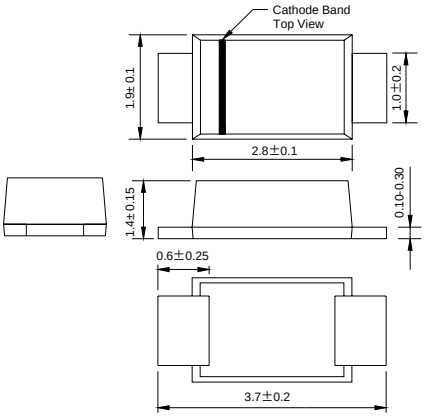
FM4001-M - FM4007-M

1.0A Surface Mount General Purpose Rectifiers



SOD-123FL



Dimensions in inches and (millimeters)

Features

- Batch process design, excellent power dissipation offers better reverse leakage current and thermal resistance.
- Low profile surface mounted application in order to optimize board space.
- Tiny plastic SMD package.
- High current capability.
- High surge capability.
- Glass passivated chip junction.

Mechanical data

- Case : Molded plastic, SOD-123FL
- Polarity : Indicated by cathode band
- Mounting Position : Any
- Weight : Approximated 0.01gram

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Maximum ratings

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.2	I_O			1.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)	I_{FSM}			30	A
Reverse current	V_R = V_{RRM} T_A = 25°C	I_R			5.0	uA
	V_R = V_{RRM} T_A = 125°C				50	
Thermal resistance	Junction to ambient	$R_{\theta JA}$		60		°C/W
	Junction to case	$R_{\theta JC}$		30		
Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage	C_J		15		pF
Storage temperature		T_{STG}	-65		+175	°C

SYMBOLS	V_{RRM} *1 (V)	V_{RMS} *2 (V)	V_R *3 (V)	V_F *4 (V)	Operating temperature T_J, (°C)
FM4001-M	50	35	50	1.10	-55 to +150
FM4002-M	100	70	100		
FM4003-M	200	140	200		
FM4004-M	400	280	400		
FM4005-M	600	420	600		
FM4006-M	800	560	800		
FM4007-M	1000	700	1000		

*1 Repetitive peak reverse voltage

*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage

FM4001-M - FM4007-M

1.0A Surface Mount General Purpose Rectifiers

Rating and characteristic curves (FM4001-M THRU FM4007-M)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

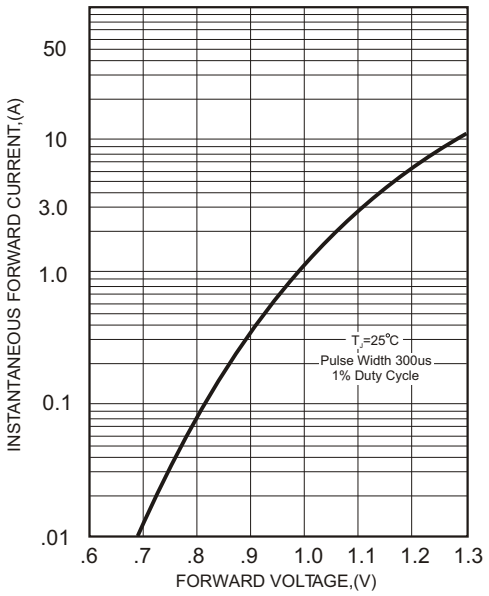


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

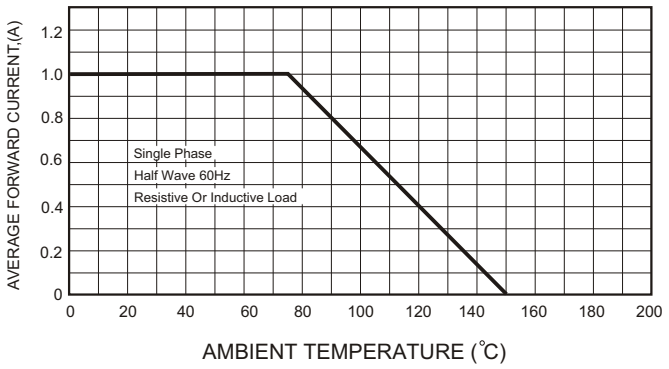


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

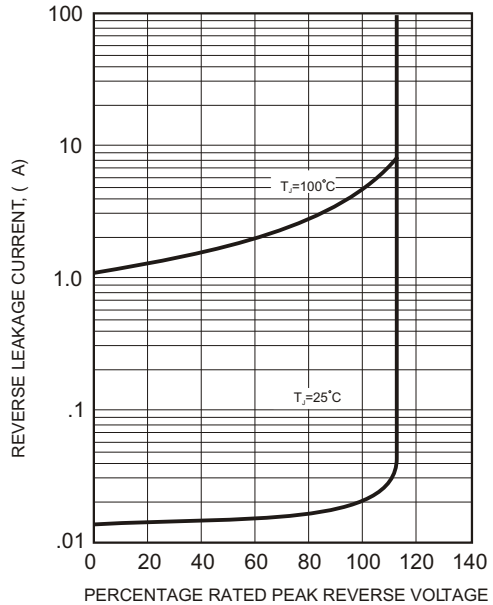


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

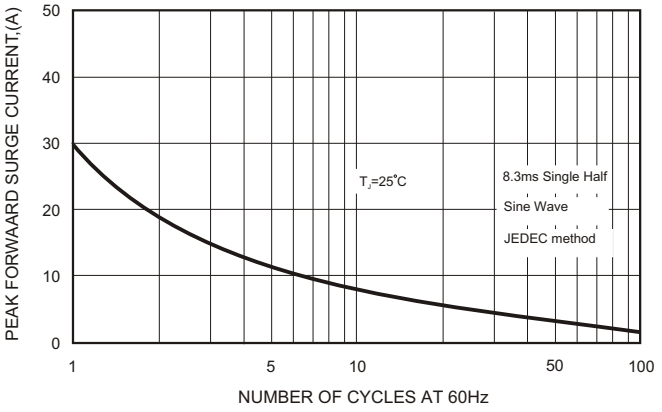


FIG.5-TYPICAL JUNCTION CAPACITANCE

