

F2AF THRU F2MF

Surface Mount Fast Recovery Rectifier

Features

- " Low profile package
- " Ideal for automated placement
- " Glass passivated chip junction
- " High forward surge capability
- " Fast reverse recovery time
- " Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

Typical Applications

consumer, and telecommunication.

Mechanical Data

- " Package : SMAF
- Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
- " Terminals : Tin plated leads, solderable per J-STD-002 and JESD22-B102
- " Polarity: Cathode line denotes the cathode end

Maximum Ratings (T_a=25 - Unless otherwise specified Å

PARAMETER	SYMBOL	UNIT	F2AF	F2BF	F2DF	F2GF	F2JF	F2KF	F2MF
Device marking code			F2AF	F2BF	F2DF	F2GF	F2JF	F2KF	F2MF
Maximum Repetitive Peak Reverse Voltage	VRRM	V	50	100	200	400	600	800	1000
Maximum RMS Voltage	VRMS	V	35	70	140	280	420	560	700
Maximum DC blocking Voltage	VDC	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, resistance load, TL (Fig.1)	I _O	A	2.0						
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, T _j =25 -	I _{FSM}	A	50						
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, T _j =25 -			100						
Current squared time @1ms "t "8.3ms T _j =25 -	I ² t	A ² s	10.375						
Storage temperature	T _{stg}	-	-55 ~ +150						
Junction temperature	T _j	-	-55 ~ +150						

Electrical Characteristics ÅT_a=25 - Unless otherwise specified Å

PARAMETER	SYMBOL
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vThermal Characteristics $\dot{A}T_a=25$ - Unless otherwise specified \dot{A}

PARAMETER	SYMBOL	UNIT	F2AF	F2BF	F2DF	F2GF	F2JF	F2KF	F2MF
Typical Thermal resistance	R J-A ⁽¹⁾	- /W	65						
	R J-L ⁽¹⁾		20						
	R J-C ⁽¹⁾		18						

Note:
 (1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

vCharacteristics (Typical)

FIG2: Surge Forward Current Capability

Peak Forward Surge Current(A)

Number of Cycles

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Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)
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