

SILICON RECTIFIERS

3 & 6 Ampere Silicon Power Diodes

FEATURES

- ❖ All diffused series.
- ❖ Available in normal & reverse polarity.
- ❖ Device conforms to IS 3700 (III) & IS 4400 (III).
- ❖ Device outline conforms to IS 5000 (Do. 4) except stud.
- ❖ Available in avalanche characteristic.

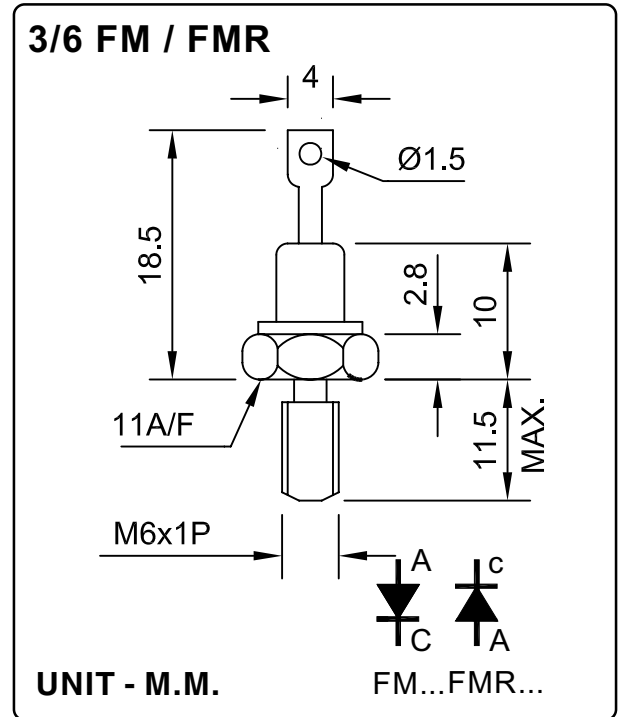
DEVICE 3FM/FMR DISCONTINUED
WITH EFFECT FROM SEPT. 01, 2007

ELECTRICAL SPECIFICATIONS

ELECTRICAL SPECIFICATIONS		3 FM/FMR	6FM/FMR
$I_{F(AV)}$	Maximum average forward current $T_c = 160^\circ\text{C}$	3A	6A
V_{FM}	Maximum peak forward voltage drop @ Rated $I_{F(peak)}$	1.10 V	1.10 V
I_{FSM}	Maximum peak one cycle (non-rep.) surge current 10 msec	120 A	159 A
I_{FRM}	Maximum repetitive peak forward current	20 A	30 A
I^2t	Max. I^2t rating (non-rep.) for 10 msec.	72 A ² Sec	127 A ² Sec

THERMAL MECHANICAL SPECIFICATIONS

θ_{J-C}	Maximum thermal resistance junction to case	5° C/W	2.5° C/W
θ_{C-H}	Contact thermal resistance	0.50° C/W	
T_j	Operating junction temp.	-65°C to 175°C	
T_{stg}	Storage temperature	-65°C to 200°C	
	Mounting torque (Non-lubricated threads)	0.14 M-Kg min. 0.17 M-Kg max.	
W	Approx. weight	7 gms.	

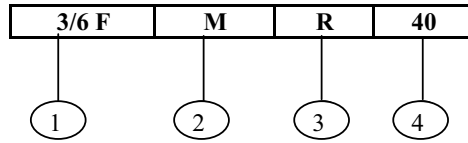


ELECTRICAL RATINGS

TYPE	NUMBER	3 FM/FMR 6 FM/FMR	10	20	40	60	80	100	120	140	160
V_{RRM}	Max. repetitive peak reverse voltage (V)		100	200	400	600	800	1000	1200	1400	1600
V_{RSM}	Max. non-repetitive peak reverse voltage (V)		150	300	500	700	900	1100	1300	1500	1700
$V_{R(RMS)}$	Max. R.M.S. reverse voltage (V)		70	140	280	420	560	700	840	980	1120
V_R	Max. D.C. Blocking voltage (V)		100	200	400	600	800	1000	1200	1400	1600
	Recommended R.M.S. working voltage (V)		40	80	160	240	320	400	480	560	640
I_{RM}	Max. Peak reverse leakage current @ V_{RRM}, T_c (mA)		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5

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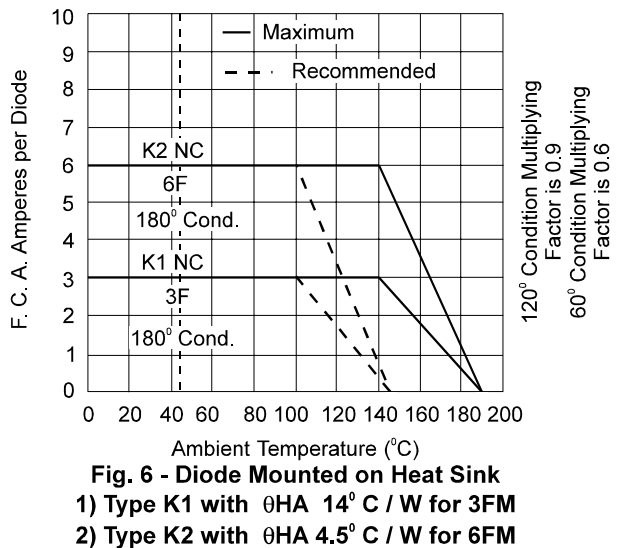
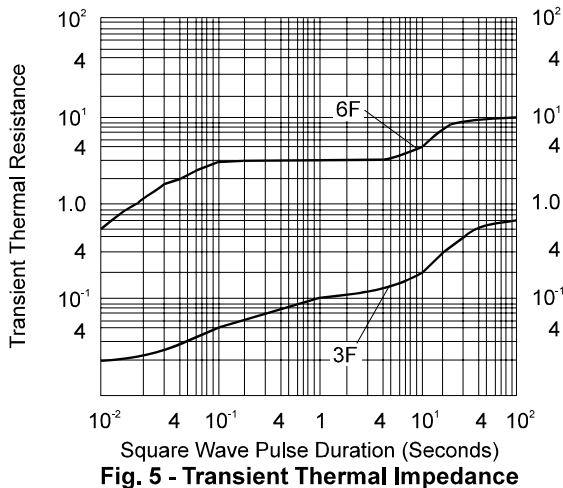
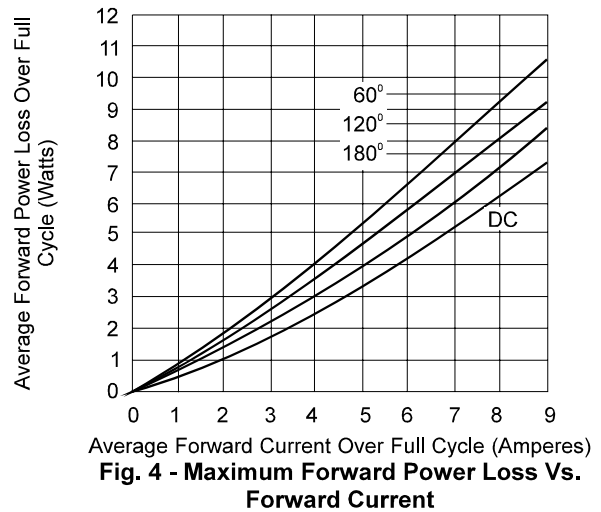
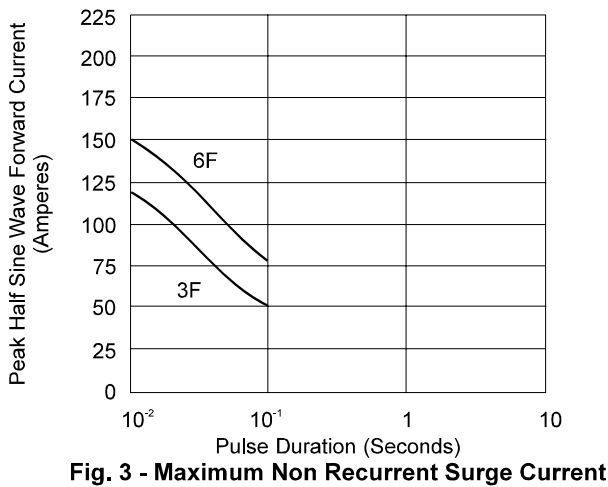
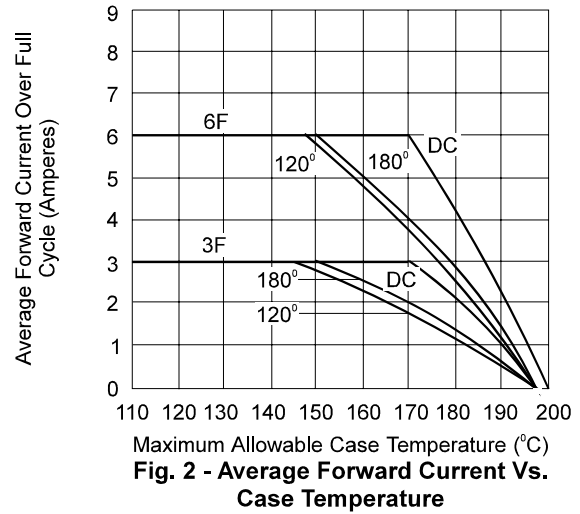
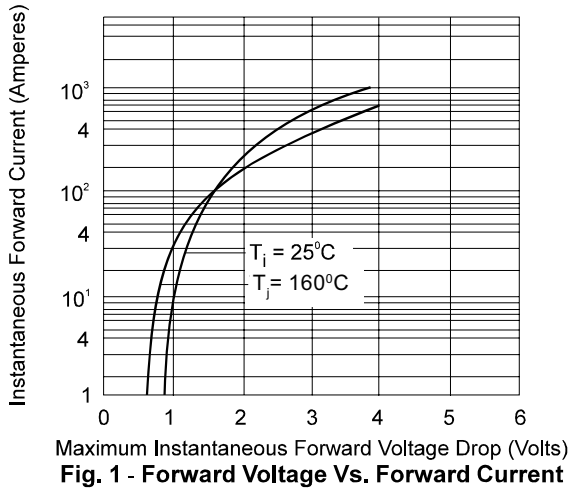
Order Information Table



1	-	3/6 F -	Essential Part No.
2	-	M - None -	Stud with 6mm Metric threading Stud with 10-32 UNF threading
3	-	None- R -	Normal polarity Reverse polarity
4	-	Voltage Rating (See table)	

SILICON RECTIFIERS

3 FM / FMR & 6 FM / FMR SERIES



Last Update : Sept.2007