



SILICON RECTIFIERS

150 Ampere Silicon Power Diodes

FEATURES

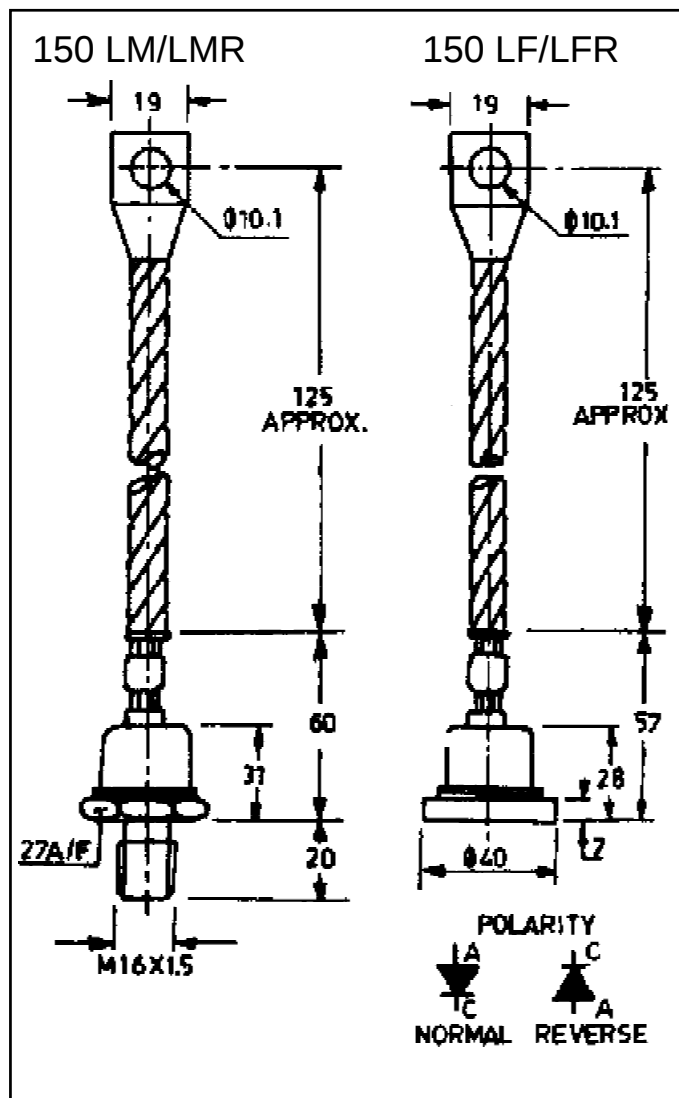
- ❖ Diffused series.
- ❖ Available in normal & reverse polarity.
- ❖ Device conforms to IS 3700 (III) & IS 4400 (III).
- ❖ Device outline conforms to IS 5000 (Do. 6).

ELECTRICAL SPECIFICATIONS

$I_{F(AV)}$	Maximum average forward current $T_c = 130^\circ\text{C}$	150 A
V_{FM}	Maximum peak forward voltage drop @ Rated $I_{F(Peak)}$	1.4 V
I_{FSM}	Maximum peak one cycle (non-rep.) surge current 10 msec.	3600 A
I_{FRM}	Maximum repetitive peak forward current	750 A
I^2t	Max. I^2t rating (non-rep.) 10 msec.	65000 A ² Sec

THERMAL MECHANICAL SPECIFICATIONS

θ_{J-C}	Maximum thermal resistance junction to case	0.25 $^\circ\text{C/W}$
θ_{C-H}	Contact thermal resistance	150LM/LMR 0.1 $^\circ\text{C/W}$ 150LF/LFR 0.07 $^\circ\text{C/W}$
T_J	Operating junction temp.	-40 $^\circ\text{C}$ to 150 $^\circ\text{C}$
T_{stg}	Storage temperature	-40 $^\circ\text{C}$ to 200 $^\circ\text{C}$
	Mounting torque (Non-lubricated threads)	2.0 M-Kg min. 3.0 M-Kg max.
W	Approx. weight	150 gms.



ELECTRICAL RATINGS

TYPE	NUMBER	150 LM/LMR 150 LF/LFR	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)		15	15	15	12	9	7	7	6	5

SILICON RECTIFIERS

150 LM / LMR & 150 LF / LFR SERIES

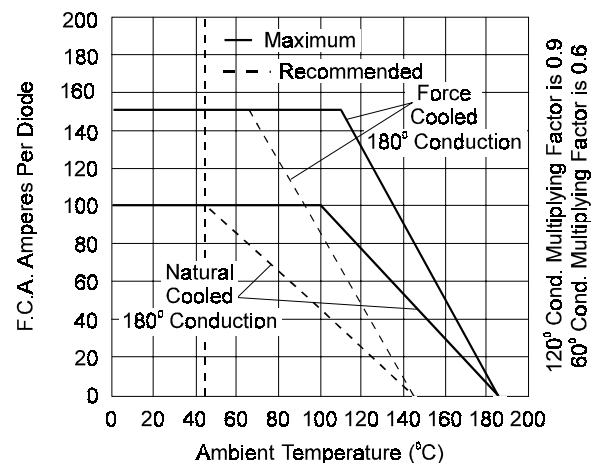
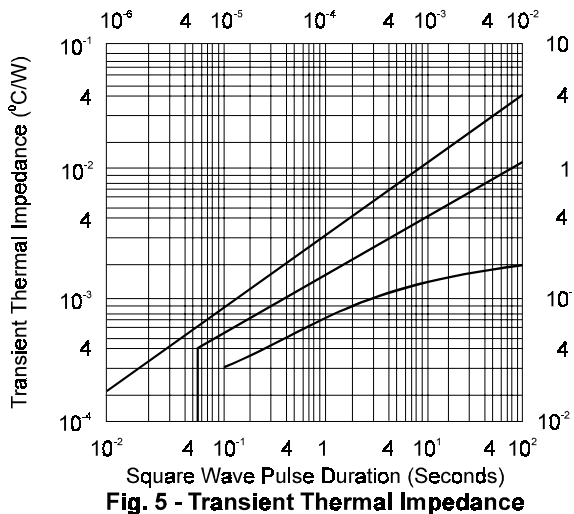
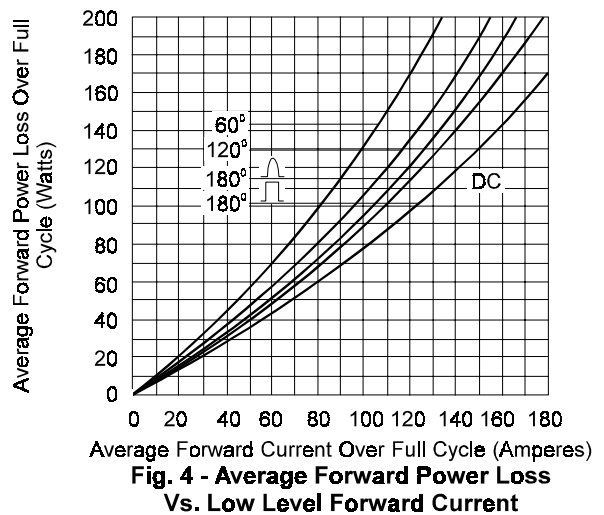
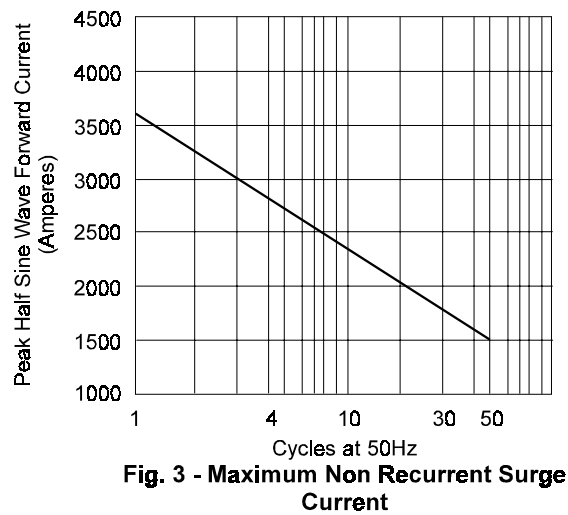
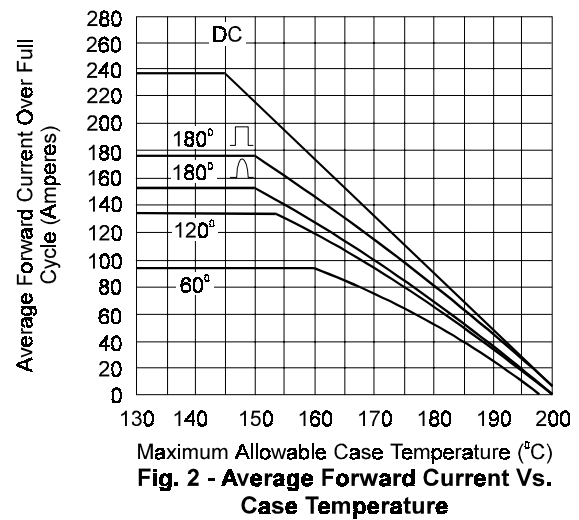
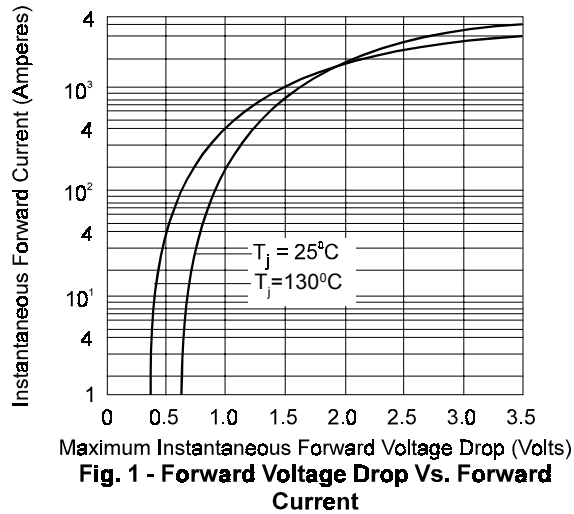


Fig. 6 - Diode 150 L/MR Mounted on Heat Sink
Type K5 with θ_{HA-NC} 0.55°C/W, FC 0.13°C/W