

SILICON RECTIFIERS

150 Ampere Silicon Power Diodes

FEATURES

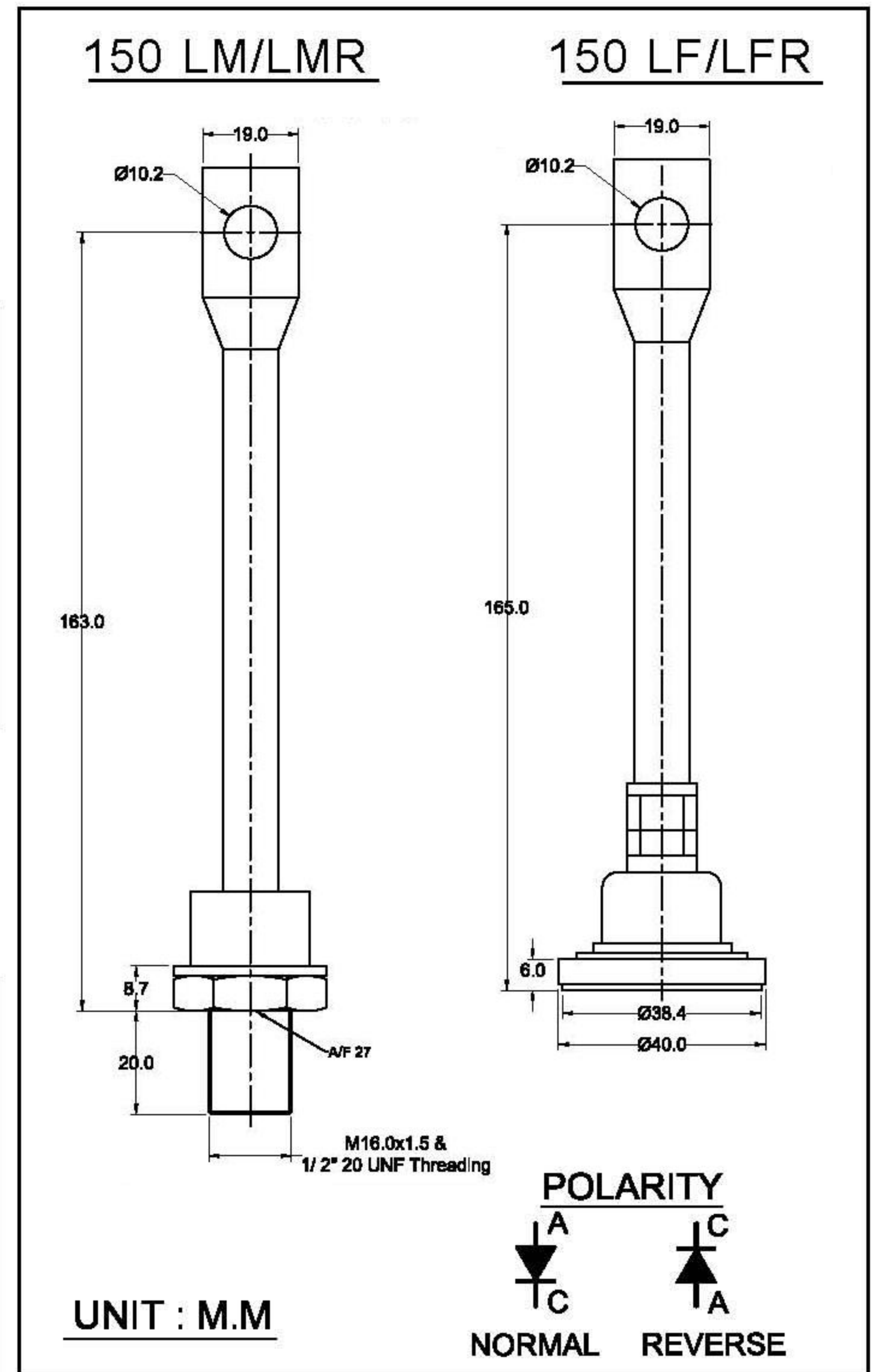
- ❖ Diffused series.
- ❖ Available in normal & reverse polarity.
- ❖ Device conforms to IS 3700 (III) & IS 4400 (III).
- ❖ Device outline conforms to IS 5000 (Do. 6).

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. | 3570 A |
| I_{FRM} | Maximum repetitive peak forward current | 750 A |
| I^2t | Max. I^2t rating (non-rep.) 10 msec. | 64000 A ² Sec |

THERMAL MECHANICAL SPECIFICATIONS

| | | |
|----------------|---|---|
| θ_{J-C} | Maximum thermal resistance junction to case | 0.25 ^o C/W |
| θ_{C-H} | Contact thermal resistance | 150LM/LMR 0.1 ^o C/W 150LF/LFR 0.07 ^o C/W |
| T_J | Operating junction temp. | -40 ^o C to 200 ^o C |
| T_{stg} | Storage temperature | -40 ^o C to 200 ^o 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 RECTIFIER

ORDER INFORMATION TABLE

| | | | |
|--------------|------------|----------|-----------|
| 150 L | M/F | R | 40 |
|--------------|------------|----------|-----------|

① ② ③ ④

- ① - 150 L - Essential Part no.
- ② - None - Stud with 1/2" UNF.2A Threading
M - Stud with M16 x 1.5P Metric Threading
F - Round flat base
K - 3/8" - 24UNF-2A
- ③ - None - Normal polarity
R - Reverse polarity
- ④ - Voltage Rating (See table)

SILICON RECTIFIERS

150 LM / LMR & 150 LF / LFR SERIES

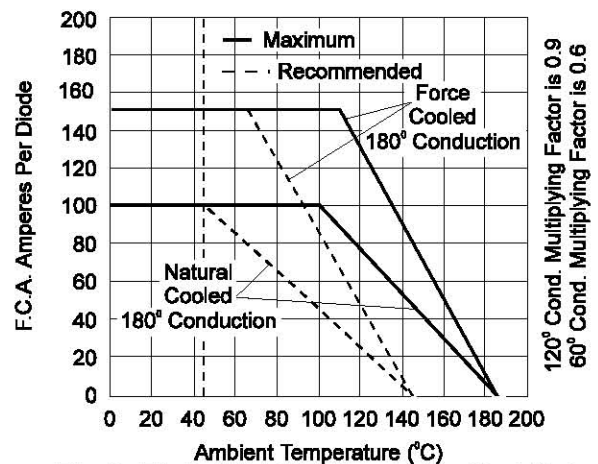
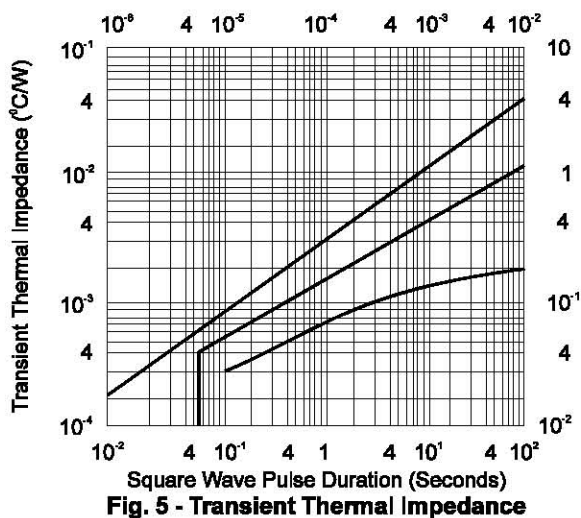
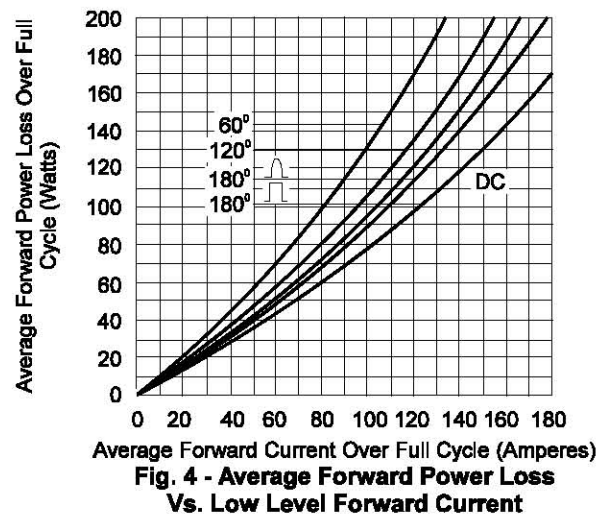
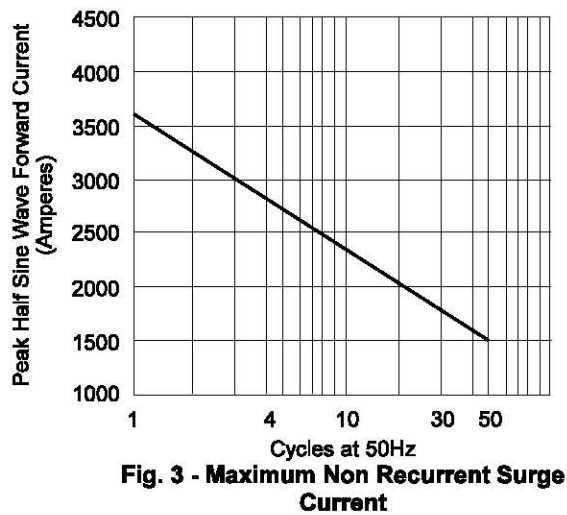
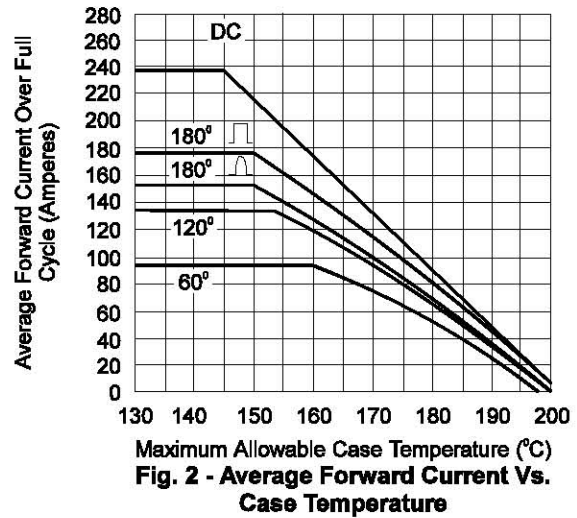
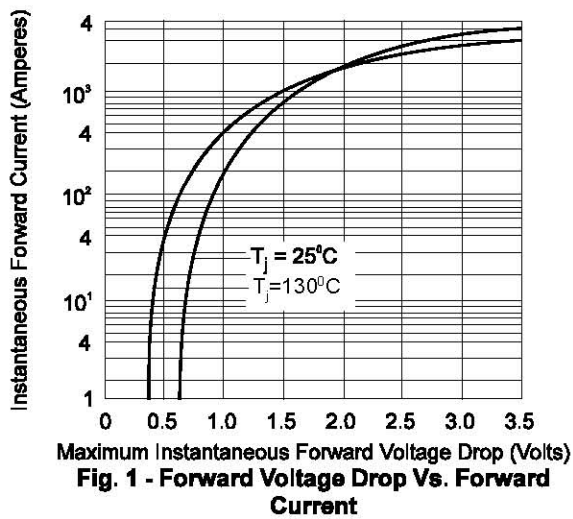


Fig. 6 - Diode 150 L/MR Mounted on Heat Sink Type K5 with θ_{HA-NC} 0.55° C/W, FC 0.13° C/W

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