

# 85HF / 85HFR

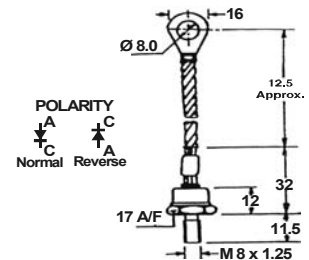
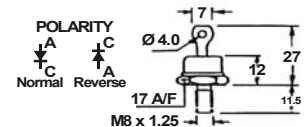
## SILICON POWER DIODE

**NAINA****DO-5****FEATURES**

- Diffused Series
- Available in Normal & Reverse Polarity
- Industrial Grade
- Available In Avalanche Characteristic
- \* Available in metric and UNF thread

**ELECTRICAL SPECIFICATIONS**

|           |   |                              |
|-----------|---|------------------------------|
| $I_F$     | Maximum Average Forward Current $T=125^{\circ}\text{C}$ | 85A                          |
| $V_{FM}$  | Maximum peak forward voltage drop @ Rated $I_F(AV)$     | 1.4V                         |
| $I_{FSM}$ | Maximum peak one cycle (non-rep) surge current 10 m sec | 1270 A                       |
| $I_{FRM}$ | Maximum peak repetitive surge current                   | 405 A                        |
| $I^2t$    | Maximum $I^2t$ rating (non-rep.) for 5 to 10 msec.      | 8064 $\text{A}^2 \text{Sec}$ |

**THERMAL MECHANICAL SPECIFICATIONS**

|               |   |                               |
|---------------|---|-------------------------------|
| $\theta_{JC}$ | Maximum thermal resistance Junction to case | 0.50°C/W                      |
| $T_J$         | Operating Junction Temp.                    | -65°C to 150°C                |
| $T_{stg}$     | Storage temperature                         | -65°C to 200°C                |
|               | Mounting torque (Non-lubricated threads)    | 0.4 M-kg min,<br>0.6 M-kg max |
| $W$           | Approx, weight                              | 13.5 & 30 gms.                |

**ELECTRICAL RATINGS**

| TYPE       | 85HF/HFR  | 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 |
| $V_R(RMS)$ | 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  |
| $I_R(AV)$  | Max. Average reverse leakage current @ $V_{RRM} T_c 25^{\circ}\text{C} \mu\text{A}$ | 200 | 200 | 200 | 200 | 200 | 200  | 200  | 200  | 200  |

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