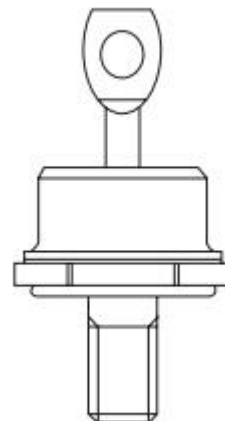


FEATURES

- With DO-5 packaging
- High surge current capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- Power switching circuits
- General rectification



DO-5

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

| SYMBOL | PARAMETER | VALUE | UNIT |
|--------------------|--|---------|------|
| VRRM VRWM VR | Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage $t_w=500ns; duty=1/40$ | 200 | V |
| IF(AV) | Average Rectified Forward Current | 50 | A |
| IFSM | Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions;One shot | 600 | A |
| TJ | Junction Temperature | -55~175 | °C |
| Tstg | Storage Temperature Range | -55~175 | °C |

THERMAL CHARACTERISTICS

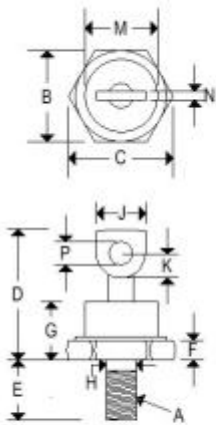
| SYMBOL | PARAMETER | MAX | UNIT |
|---------------------|--------------------------------------|-----|------|
| R _{th j-c} | Thermal Resistance, Junction to Case | 10 | °C/W |

ELECTRICAL CHARACTERISTICS

| SYMBOL | PARAMETER | CONDITIONS | MAX | UNIT |
|----------|---------------------------------------|---|----------|---------------|
| V_F | Maximum Instantaneous Forward Voltage | $I_F = 50A, T_j = 25^\circ C$ | 1.15 | V |
| I_R | Maximum Instantaneous Reverse Current | $V_R = V_{RWM}, T_j = 25^\circ C$ $V_R = V_{RWM}, T_j = 125^\circ C$ | 10 10 | μA mA |
| t_{rr} | Maximum Reverse Recovery Time | $I_F = 10A; di/dt = 50 A/\mu s; V_R = 30 V$ | 50 | ns |

PACKAGE OUTLINE

Dimensions in mm (1mm = 0.0394")



| | DO-5(R) | | | |
|---|----------------------|-------|-------------|--------|
| | Inches | | Millimeters | |
| | Min | Max | Min | Max |
| A | 1/4-28 UNF2A threads | | | |
| B | 0.669 | 0.688 | 16.990 | 17.480 |
| C | - | 0.794 | - | 20.160 |
| D | - | 1.000 | - | 25.400 |
| E | 0.422 | 0.453 | 10.720 | 11.510 |
| F | 0.115 | 0.200 | 2.920 | 5.080 |
| G | - | 0.450 | - | 11.430 |
| H | 0.220 | 0.249 | 5.580 | 6.320 |
| J | 0.250 | 0.375 | 6.350 | 9.530 |
| K | 0.156 | - | 3.960 | - |
| M | - | 0.667 | - | 16.940 |
| N | 0.030 | 0.080 | 0.760 | 2.030 |
| P | 0.140 | 0.175 | 3.560 | 4.450 |

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