

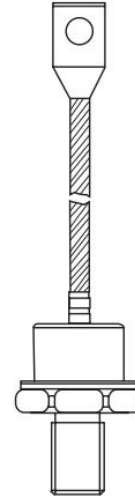
Standard Recovery Diodes

FEATURES

- High surge current capability
- Wide current range
- High voltage ratings up to 2500V
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Battery charges
- Converters
- Power supplies
- Machine tool controls



U = Stud Normal Polarity (Cathode to Stud)

UR = Stud Reverse Polarity (Anode to Stud)

ABSOLUTE MAXIMUM RATINGS

| SYMBOL | PARAMETER | CONDITIONS | | VALUE | UNIT |
|-------------|---------------------------------|--|---------------------------|---------|-------------------|
| V_{RRM} | Repetitive Peak Reverse Voltage | | | 2500 | V |
| $I_{F(AV)}$ | Average Forward Current | $T_c=120^{\circ}\text{C}$, 180° conduction, half sine wave | | 300 | A |
| I_{FSM} | Surge Forward Current | t=10ms | No voltage reappplied | 6550 | A |
| | | t=8.3ms | | 6850 | |
| | | t=10ms | 100% V_{RRM} reappplied | 5500 | |
| | | t=8.3ms | | 5750 | |
| I^2t | I^2t for fusing | t=10ms | No voltage reappplied | 214 | KA ₂ s |
| | | t=8.3ms | | 195 | |
| | | t=10ms | 100% V_{RRM} reappplied | 151 | |
| | | t=8.3ms | | 138 | |
| T_J | Junction Temperature | | | -65~200 | °C |
| T_{stg} | Storage Temperature Range | | | -65~200 | °C |

THERMAL CHARACTERISTICS

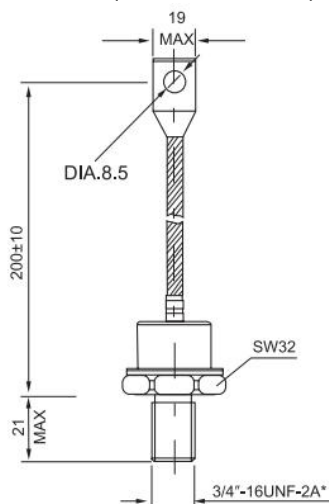
| SYMBOL | PARAMETER | MAX | UNIT |
|---------------|--------------------------------------|------|------|
| $R_{th\ j-c}$ | Thermal Resistance, Junction to Case | 0.18 | °C/W |

ELECTRICAL CHARACTERISTICS

| SYMBOL | PARAMETER | CONDITIONS | MAX | UNIT |
|----------|----------------------|--------------------------------|-----|------|
| V_{FM} | Forward Voltage drop | $I_F = 942A, T_J = 25^\circ C$ | 1.4 | V |

PACKAGE OUTLINE

Dimensions in mm (1mm = 0.0394")



*FOR METRIC DEVICE: M16 × 1.5 / M20 × 1.5

NOTICE:

ISC reserves the rights to make changes of the content herein the datasheet at any time without notification. The information contained herein is presented only as a guide for the applications of our products.

ISC products are intended for usage in general electronic equipment. The products are not designed for use in equipment which require specialized quality and/or reliability, or in equipment which could have applications in hazardous environments, aerospace industry, or medical field. Please contact us if you intend our products to be used in these special applications. ISC makes no warranty or guarantee regarding the suitability of its products for any particular purpose, nor does ISC assume any liability arising from the application or use of any products, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.