

Ultra fast Rectifier

20ETF10

FEATURES

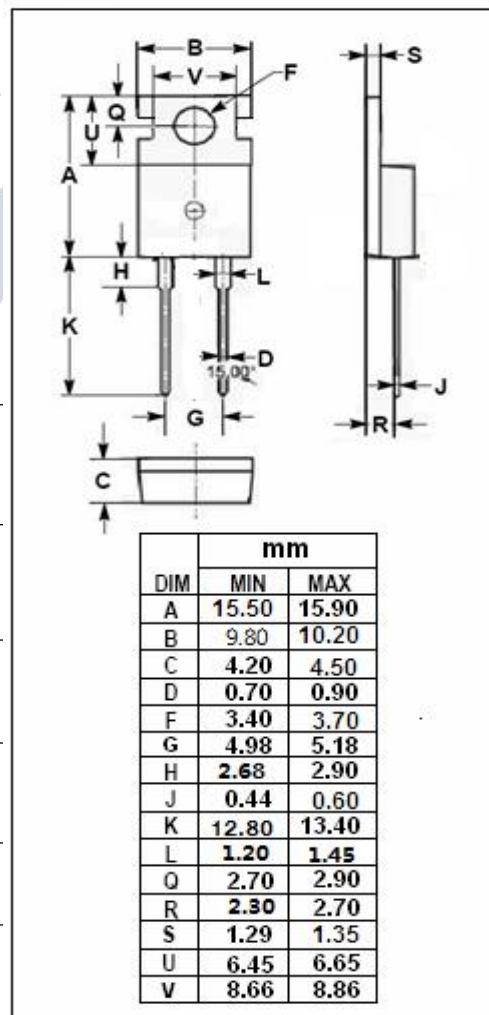
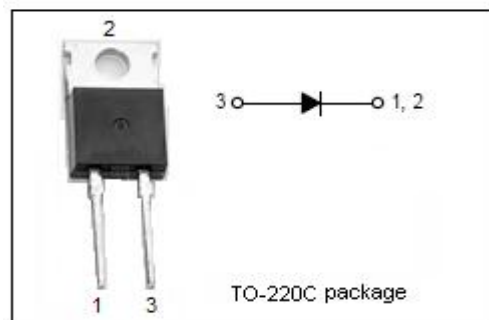
- With TO-220 packaging
- Low forward voltage drop
- Super high speed switching
- High reliability by planer design
- High surge current capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- Power switching circuits
- High speed power switching

ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

| SYMBOL | PARAMETER | VALUE | UNIT |
|--------------------|---|---------|------|
| V _{RRM} | Peak Repetitive Reverse Voltage | 1000 | V |
| I _{F(AV)} | Average Rectified Forward Current @T _c =97°C; 180° condition half sine wave | 20 | A |
| I _{FSM} | Non-repetitive Peak Surge Current 10ms sine pulse, rated V _{RRM} applied | 300 | A |
| T _J | Junction Temperature | -40~150 | °C |
| T _{stg} | Storage Temperature Range | -40~150 | °C |



Ultra fast Rectifier

20ETF10

THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------------|--------------------------------------|-----|------|
| R _{th j-c} | Thermal Resistance, Junction to Case | 0.9 | °C/W |

ELECTRICAL CHARACTERISTICS(T_a=25°C) (Pulse Test: Pulse Width=300 μs, Duty Cycle≤2%)

| SYMBOL | PARAMETER | CONDITIONS | MAX | UNIT |
|-----------------|---------------------------------------|---|----------|------|
| V _F | Maximum Instantaneous Forward Voltage | I _F =20A | 2.4 | V |
| I _R | Maximum Instantaneous Reverse Current | V _R = V _{RWM} ; T _c =25°C V _R = V _{RWM} ; T _c =150°C | 0.1 6 | mA |
| t _{rr} | Maximum Reverse Recovery Time | I _F =20A; dI/dt=25A/ μs | 160 | ns |

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.