

Schottky Barrier Rectifier

FMB-39

FEATURES

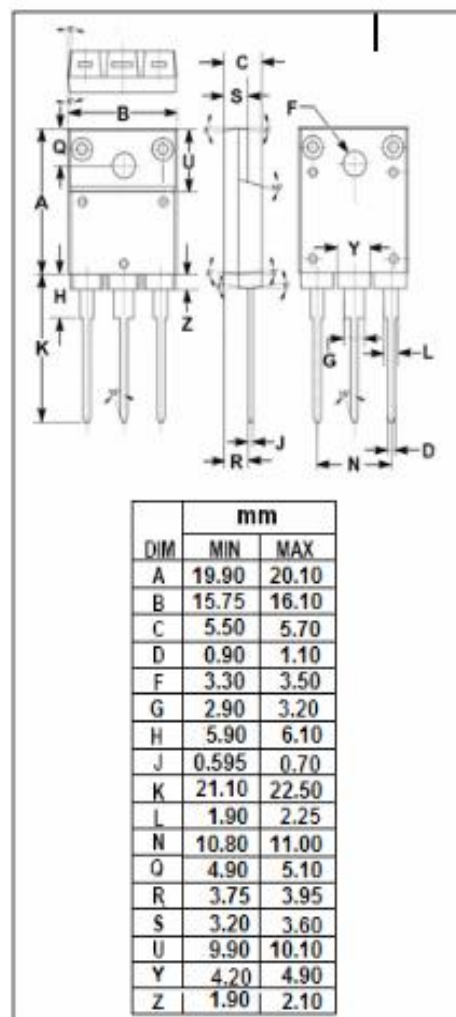
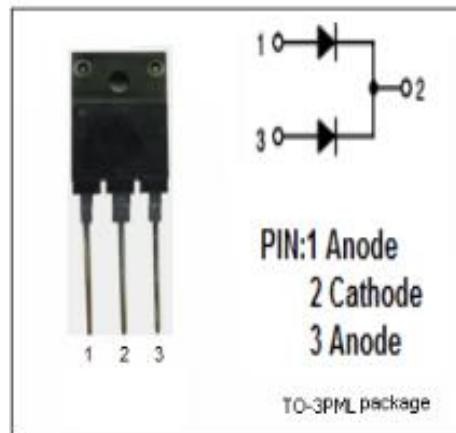
- With TO-3PML packaging
- Center tap configuration
- 150°C Operating Junction Temperature
- Guaranteed Reverse Avalanche
- Ultralow forward voltage drop
- High frequency operation
- Low Stored Charge Majority Carrier Conduction
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- Converters
- Free-Wheeling diodes
- Reverse battery protection
- Center tap configuration

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

| SYMBOL | PARAMETER | VALUE | UNIT |
|--------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|---------|------|
| V _{RRM} V _{RMS} V _R | Peak Repetitive Reverse Voltage RMS Voltage DC Blocking Voltage | 90 | V |
| I _{F(AV)} | Average Rectified Forward Current (Rated V _R) T _C = 106°C | 15 | A |
| I _{FSM} | Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions T _C = 150°C | 60 | A |
| T _J | Junction Temperature | -40~150 | °C |
| T _{stg} | Storage Temperature Range | -40~150 | °C |



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THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------|--------------------------------------|-----|---------------|
| $R_{th\ j-c}$ | Thermal Resistance, Junction to Case | 2.0 | $^{\circ}C/W$ |

ELECTRICAL CHARACTERISTICS (Pulse Test: Pulse Width=300 μ s, Duty Cycle \leq 1%)

| SYMBOL | PARAMETER | CONDITIONS | MAX | UNIT |
|--------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|----------|------|
| V_F | Maximum Instantaneous Forward Voltage | $I_F = 7.5A$ | 0.81 | V |
| I_R | Maximum Instantaneous Reverse Current (Measured at 1MHz and Applied Reverse Voltage of 4.0V) | $V_R = \text{rated } V_{RRM}; T_C = 25^{\circ}C$ $V_R = \text{rated } V_{RRM}; T_C = 100^{\circ}C$ | 10 50 | mA |

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