

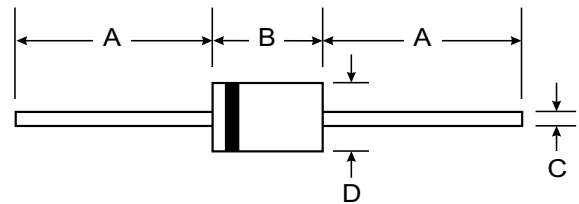
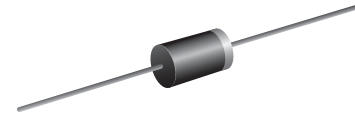
**VOLTAGE RANGE: 30V**  
**CURRENT: 2.0 A**

### Features

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- High Current Capability
- Low Power Loss, High Efficiency
- High Surge Current Capability
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications

### Mechanical Data

- Case: DO-15, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.40 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



| DO-15                |       |       |
|----------------------|-------|-------|
| Dim                  | Min   | Max   |
| A                    | 25.40 | —     |
| B                    | 5.50  | 7.62  |
| C                    | 0.686 | 0.889 |
| D                    | 2.60  | 3.60  |
| All Dimensions in mm |       |       |

### Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

| Characteristic  | Symbol                          | 2FWJ42M     | Unit               |
|---|---------------------------------|-------------|--------------------|
| Peak Repetitive Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage                                | $V_{RRM}$<br>$V_{RWM}$<br>$V_R$ | 30          | V                  |
| RMS Reverse Voltage   | $V_{R(RMS)}$                    | 21          | V                  |
| Average Rectified Output Current @ $T_L = 100^\circ\text{C}$<br>(Note 1)  | $I_O$                           | 2.0         | A                  |
| Non-Repetitive Peak Forward Surge Current 8.3ms<br>Single half sine-wave superimposed on rated load<br>(JEDEC Method) | $I_{FSM}$                       | 50          | A                  |
| Forward Voltage @ $I_F = 2.0\text{A}$   | $V_{FM}$                        | 0.50        | V                  |
| Peak Reverse Current @ $T_A = 25^\circ\text{C}$<br>At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$           | $I_{RM}$                        | 0.5<br>10   | mA                 |
| Typical Junction Capacitance (Note 2)   | $C_j$                           | 170         | pF                 |
| Typical Thermal Resistance (Note 1)   | $R_{\theta JA}$                 | 35          | $^\circ\text{C/W}$ |
| Operating and Storage Temperature Range   | $T_j, T_{STG}$                  | -65 to +150 | $^\circ\text{C}$   |

Note: 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.  
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.