

## Standard Rectifiers

**Reverse Voltage - 1600V**

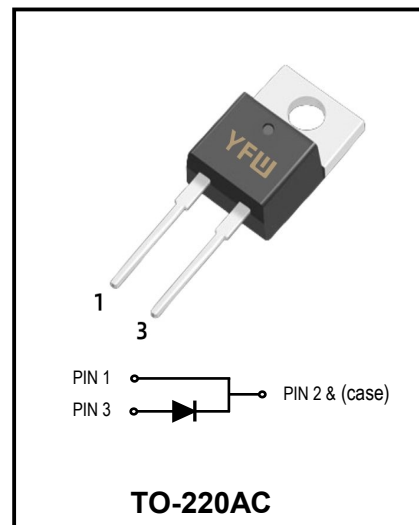
**Forward Current - 15A**

### Features

- ◆Glass passivated chip junctions
- ◆Low reverse current operation
- ◆High Junction Temperature
- ◆High Forward Surge Capability
- ◆Lead free in compliance with EU RoHS 2011/65/EU directive

### Mechanical Data

- ◆Circuit figure: Single positive
- ◆Leads: Solderable per mil-std-202, Method 208
- ◆Polarity: as marked
- ◆Mounting torque: 5 in-lbs maximum
- ◆Terminals: Puretin plated
- ◆Weight: 1.80 grams



### Maximum Ratings & Electrical Characteristics

| RATINGS                                                                                              | Symbol          | Value       | Unit    |
|------------------------------------------------------------------------------------------------------|-----------------|-------------|---------|
| Maximum Repetitive Reverse Voltage                                                                   | $V_{RRM}$       | 1600        | V       |
| Maximum RMS voltage                                                                                  | $V_{RMS}$       | 1120        | V       |
| Maximum DC blocking voltage                                                                          | $V_{DC}$        | 1600        | V       |
| Maximum average forward current                                                                      | $I_{AV}$        | 15          | A       |
| Max.Forward Surge Current ,8.3ms single half sine-wave superimposed on rated load                    | $I_{FSM}$       | 200         | A       |
| Typical Thermal Resistance                                                                           | $R_{\theta-JC}$ | 2.5         | °C/W    |
| Operating Junction Temperature Range                                                                 | $T_J$           | -55 to +150 | °C      |
| Storage Temperature Range                                                                            | $T_{STG}$       | -55 to +150 | °C      |
| <b>CHARACTERISTICS</b>                                                                               |                 |             |         |
| Maximum forward voltage per leg at 16A                                                               | $V_F$           | 1.2         | V       |
| Maximum average reverse current $T_J=25^{\circ}C$<br>at rated DC blocking voltage $T_J=125^{\circ}C$ | $I_R$           | 5<br>250    | $\mu A$ |

**Ratings and Characteristic Curves**

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

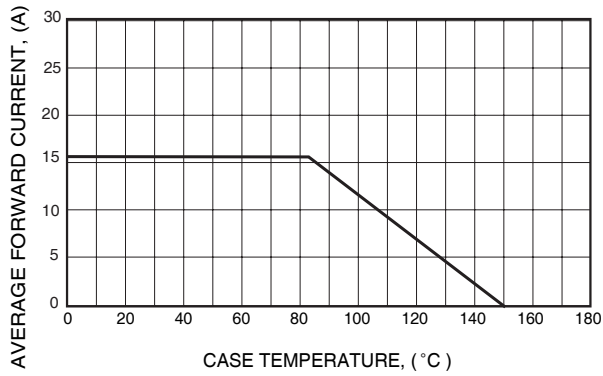


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

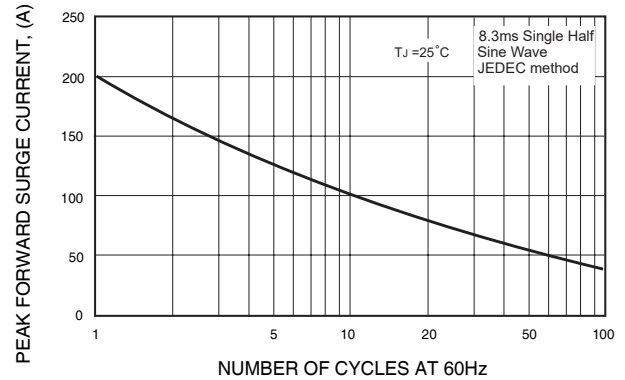


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

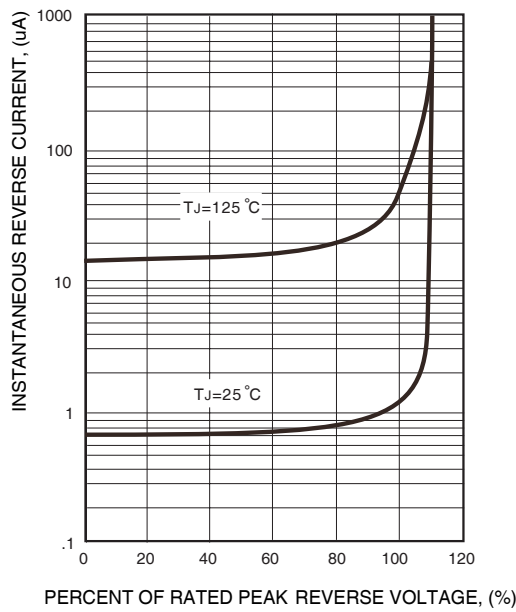
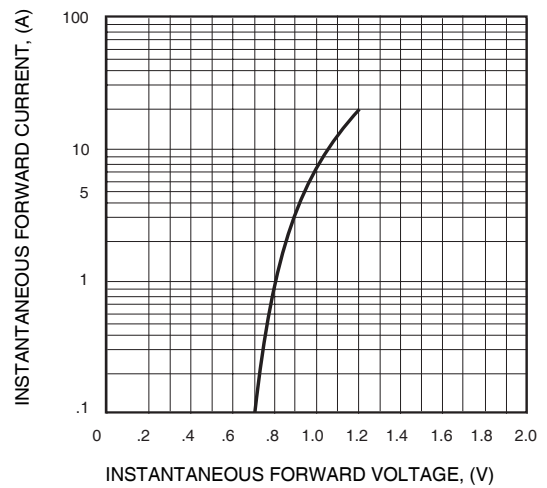
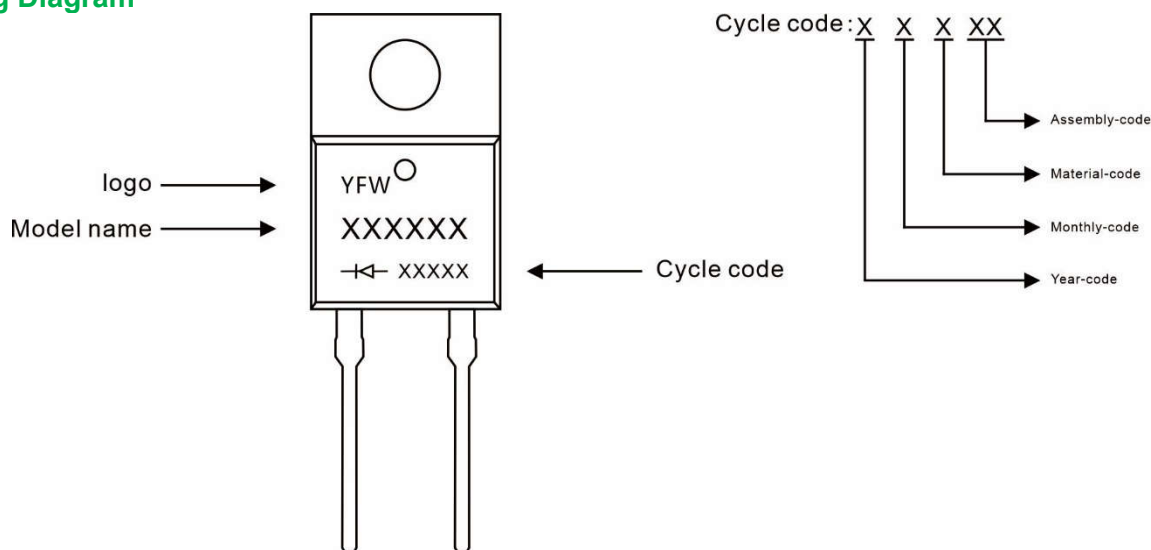


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



## Marking Diagram



## Ordering information

| Model name | Package  | Unit Weight   | Base Quantity | Packing Quantity           |
|------------|----------|---------------|---------------|----------------------------|
| G15160DA   | TO-220AC | 0.067oz(1.9g) | 50pcs/tube    | 1000PCS/Box 5000PCS/Carton |

## Package Dimensions

### TO-220AC

| Dim | Millimeter |       | Inches |       |
|-----|------------|-------|--------|-------|
|     | Min.       | Max.  | Min.   | Max.  |
| A   | 4.34       | 4.67  | 0.171  | 0.184 |
| A1  | 2.52       | 2.82  | 0.099  | 0.111 |
| b   | 0.71       | 0.91  | 0.028  | 0.036 |
| b1  | 1.17       | 1.37  | 0.046  | 0.054 |
| c   | 0.30       | 0.50  | 0.012  | 0.020 |
| c1  | 1.17       | 1.37  | 0.046  | 0.054 |
| D   | 9.90       | 10.20 | 0.390  | 0.402 |
| E   | 8.50       | 8.90  | 0.335  | 0.350 |
| E1  | 12.00      | 12.50 | 0.472  | 0.492 |
| e   | 4.88       | 5.28  | 0.192  | 0.208 |
| F   | 2.60       | 2.80  | 0.102  | 0.110 |
| L   | 13.20      | 13.80 | 0.520  | 0.543 |
| L1  | 3.80       | 4.20  | 0.150  | 0.165 |
| Φ   | 3.60       | 3.96  | 0.142  | 0.156 |

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