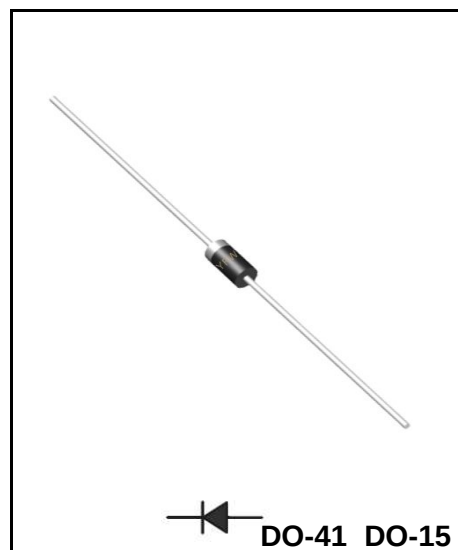


**0.5/0.2Amp High Voltage Rectifier**
**Reverse Voltage - 1200 to 5000 V**
**Forward Current – 0.5/0.2A**
**FEATURES**

- ◆Construction utilizes void-free molded plastic technique
- ◆Low profile package
- ◆High forward surge current capability
- ◆High temperature soldering guaranteed: 250°C/10 seconds, 0.375"(9.5mm) lead length, 5 lbs. (2.3kg) tension
- ◆Lead free in comply with EU RoHS 2011/65/EU directives

**MECHANICAL DATA**

- ◆Case: DO-41/DO-15
- ◆Terminals: Solderable per MIL-STD-750, Method 2026
- ◆Approx. Weight: 0.33g / 0.012oz(DO-41)
- ◆Approx. Weight: 0.40g / 0.014oz(DO-15)


**Absolute Maximum Ratings and characteristics**

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

| Parameter                                                                                                                       | Symbols         | R1200         | R1500 | R1800 | R2000 | R2500 | R3000 | R3500 | R4000 | R5000 | Units                |
|---------------------------------------------------------------------------------------------------------------------------------|-----------------|---------------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|
| Maximum Repetitive Peak Reverse Voltage                                                                                         | $V_{RRM}$       | 1200          | 1500  | 1800  | 2000  | 2500  | 3000  | 3500  | 4000  | 5000  | V                    |
| Maximum RMS voltage                                                                                                             | $V_{RMS}$       | 840           | 1050  | 1260  | 1400  | 1750  | 2100  | 3450  | 2800  | 3500  | V                    |
| Maximum DC Blocking Voltage                                                                                                     | $V_{DC}$        | 1200          | 1500  | 1800  | 2000  | 2500  | 3000  | 3500  | 4000  | 5000  | V                    |
| Maximum Average Forward Rectified Current at $T_c = 125\text{ }^{\circ}\text{C}$                                                | $I_{F(AV)}$     | 0.5           |       |       | 0.2   |       |       |       |       |       | A                    |
| Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load                                              | $I_{FSM}$       | 30.0          |       |       |       |       |       |       |       |       | A                    |
| Maximum Instantaneous Forward Voltage at 0.5 A                                                                                  | $V_F$           | 2.0           |       |       | 3.0   |       | 4.0   |       | 5.0   |       | V                    |
| Maximum DC Reverse Current $T_a = 25\text{ }^{\circ}\text{C}$<br>at Rated DC Blocking Voltage $T_a=100\text{ }^{\circ}\text{C}$ | $I_R$           | 10.0<br>200.0 |       |       |       |       |       |       |       |       | $\mu\text{A}$        |
| Typical Junction Capacitance <sup>(1)</sup>                                                                                     | $C_j$           | 15.0          |       |       |       |       |       |       |       |       | pF                   |
| Typical Thermal Resistance <sup>(2)</sup>                                                                                       | $R_{\theta JA}$ | 50.0          |       |       |       |       |       |       |       |       | $^{\circ}\text{C/W}$ |
| Operating and Storage Temperature Range                                                                                         | $T_j, T_{stg}$  | -55 ~ +150    |       |       |       |       |       |       |       |       | $^{\circ}\text{C}$   |

<sup>(1)</sup> Measured at 1MHz and applied reverse voltage of 4.0V D.C.

<sup>(2)</sup> Thermal resistance from junction to ambient at 0.375"(9.5mm)lead length,P.C.B. mounted

# Ratings And Characteristic Curves

## R1200 THRU R5000

FIG. 1- FORWARD CURRENT DERATING CURVE

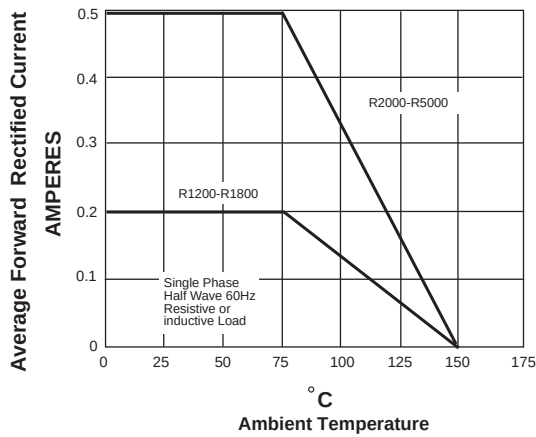


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

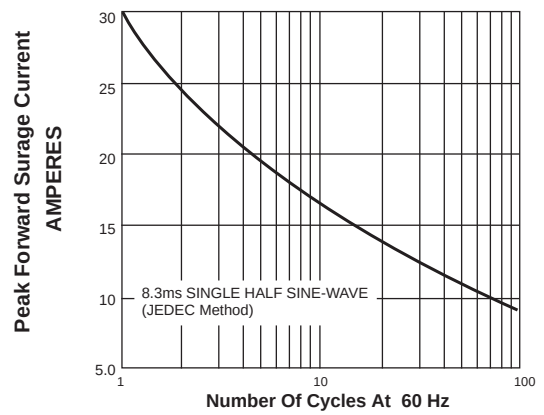
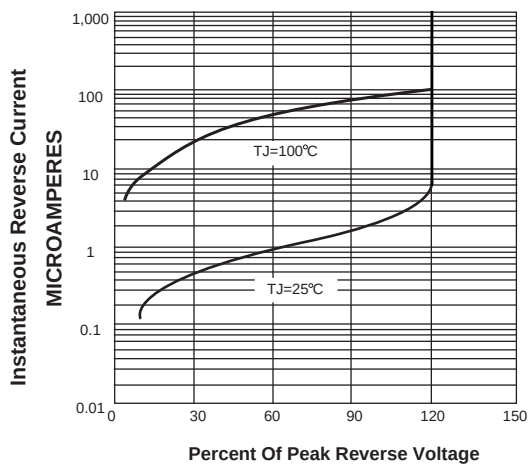


FIG. 3-TYPICAL REVERSE CHARACTERISTICS



## Ordering information

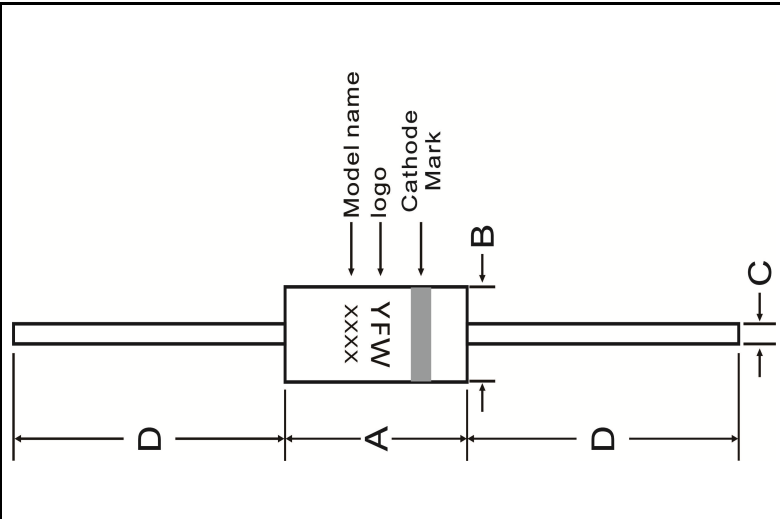
| Package | Packing Description | Packing Quantity            |
|---------|---------------------|-----------------------------|
| DO-41   | bulk                | 1000PCS/Box 25000PCS/Carton |
|         | braid               | 5000PCS/Box 50000PCS/Carton |

| Package | Packing Description | Packing Quantity            |
|---------|---------------------|-----------------------------|
| DO-15   | bulk                | 500PCS/Box 30000PCS/Carton  |
|         | braid               | 3000PCS/Box 30000PCS/Carton |

## Package Dimensions

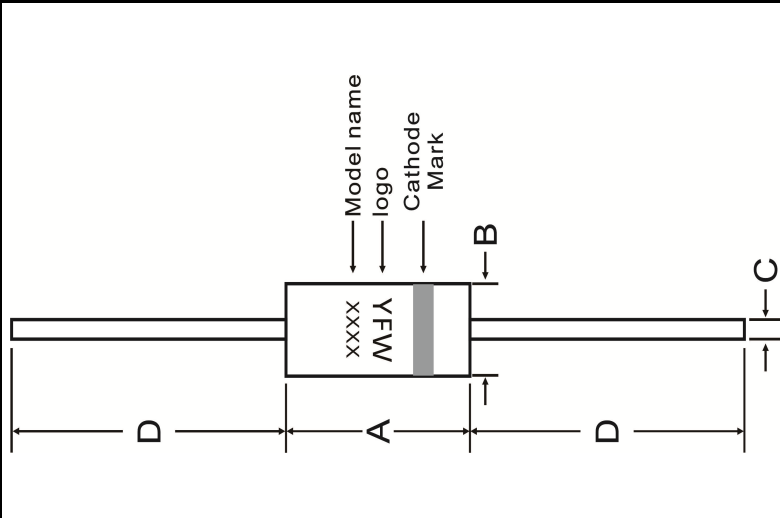
### DO-41

| Dim. | Millimeter(mm) |      | INCHES |       |
|------|----------------|------|--------|-------|
|      | Min.           | Max. | Min.   | Max.  |
| A    | 4.10           | 5.20 | 0.166  | 0.205 |
| B    | 2.00           | 2.70 | 0.080  | 0.107 |
| C    | 0.60           | 0.70 | 0.024  | 0.028 |
| D    | 25.4           | -    | 1.00   | -     |



### DO-15

| Dim. | Millimeter(mm) |      | INCHES |       |
|------|----------------|------|--------|-------|
|      | Min.           | Max. | Min.   | Max.  |
| A    | 5.80           | 7.60 | 0.230  | 0.300 |
| B    | 2.60           | 3.60 | 0.104  | 0.140 |
| C    | 0.71           | 0.86 | 0.028  | 0.034 |
| D    | 25.4           | -    | 1.00   | -     |



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