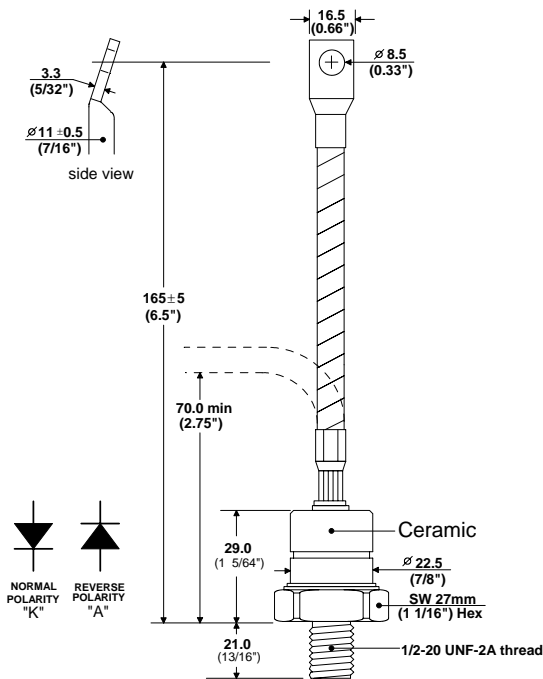


## DO-8 package



## Short Form Data Sheet

Part number scheme

**DO-8 K 15 N 12 KNX**  
1 2 3 4 5 6

- 1) Package designation
- 2) Polarity ("A" Anode thread, "K" Cathode tread)
- 3) Series number
- 4) Designates standard recovery time
- 5) Voltage Multiplier (example: 12 x 100 = 1200)
- 6) Proprietary suffix

### Features:

- ✓ All diffused silicone.
- ✓ Metal Ceramic package, conforms to JEDEC D0-8.
- ✓ Hermetic seal.
- ✓ Vibration resistant.

### Applications:

- Welding
- Plating
- Power Supplies

## Voltage

| Parameter   | Symbol            | Rating          | Units |
|---|-------------------|-----------------|-------|
| Maximum Repetitive Reverse Voltage <small>Notes: 1, 3, 4, 5, 6</small>  | $V_{RRM}$         | 1200 ~ 1800     | Volts |
| Maximum non repetitive Surge of Reverse Voltage <small>Notes: 2, 3, 4, 5, 6</small>   | $V_{RSM}$         | $V_{RRM} + 100$ | Volts |
| Maximum non repetitive Forward Voltage <small>Notes: 2</small>  | $V_{FM} @ I_{FM}$ | 1.3 @ 470       | V @ A |
| <small>Note 1: <math>T_J</math> 25°C. Note 2: <math>T_J</math> 125°C. Note 3: Measured at the sine wave's peak.. Note 4: Below 0°C derate <math>V_{RRM}</math> 10%. Note 5: <math>V_{RRM}</math> has <math>I_{RRM}</math> of up to 30mA. Note 6: <math>V_{RR}</math> has typical <math>I_{RR}</math> of 2~7mA. Note 7: For DC applications derate <math>V_{RRM}</math> 45%.</small> |                   |                 |       |
| <small>Specifying voltage: 1400V, DO-8K15N14 1800V, DO-8K15N18<br/>1200V, DO-8K15N12 1600V, DO-8K15N16 Above 1800V inquire for availability.</small>  |                   |                 |       |

## Amperage

| Parameter   | Symbol                | Rating          | Units     |
|---|-----------------------|-----------------|-----------|
| Maximum, Average Current <small>Notes: 3, 4</small>   | $I_{F(AVE)}$          | 150             | Amperes   |
| Maximum, RMS Current <small>Notes: 3, 4</small>   | $I_{F(RMS)}$          | 236             | Amperes   |
| Maximum non repetitive Surge Current with no reverse voltage reapplied. <small>Notes: 2, 4</small>  | $I_{FSM} 0\% V_{RRM}$ | 3               | kA        |
| $I_{RR}$ = Typical Repetitive, Reverse, Current. <small>Note: 1</small>   | $I_{RR}$              | 3 ~ 7           | mA        |
| $I_{RRM}$ = Maximum (threshold), Repetitive, Reverse, Current. <small>Note: 1</small>   | $I_{RRM}$             | 30              | mA        |
| Fuse's absolute maximum $I^2 t$ with no reverse voltage reapplied <small>Note: 2, 4</small>   | $I^2 t, 0\% V_{RR}$   | 22.5            | kA        |
| Reverse Recovery Charge ( $C_s$ = Stored Charge)  | $Q_{RR}$              | Consult factory | $\mu C_s$ |
| <small>Note 1: <math>T_J</math> 25°C. Note 2: <math>T_J</math> 125°C. Note 3: <math>T_{CASE}</math> 55°C air cooled. Note 4: 180° conduction, 60Hz sine wave.</small> |                       |                 |           |

## Thermal, Mechanical & Weight

| Parameter   | Symbol        | Rating      | Units    |
|---|---------------|-------------|----------|
| Operating Temperature Range   | $T_J$         | -40° ~ 180° | °Celsius |
| Maximum Thermal resistance, Junction to Case <small>Notes: 1, 2</small>   | $R_{th-J-C}$  | 0.25        | °C/W     |
| Maximum Thermal resistance, Case to Heat Sink <small>Notes: 1, 2, 3, 4, 5</small>   | $R_{th-C-hs}$ | 0.1         | °C/W     |
| Mounting Torque (No Lubrication on Threads)   |               |             |          |
|   |               | 20          | Nm       |
|   |               | 177         | lbf/in   |
| Weight  |               |             |          |
|   |               | 120         | Grams    |
|   |               | 4.2         | oz.      |
| <small>Note 1: Recommended mounting torque applied Note 2: 180° conduction, 60Hz sine wave.<br/>Note 3: Case Temperature measured at hex section of base.</small> |               |             |          |