

GLASS PASSIVATED UNIDIRECTIONAL AND BIDIRECTIONAL TRANSIENT VOLTAGE SUPPRESSORS

REVERSE VOLTAGE - 15 to 200 Volts
POWER DISSIPATION - 15000 WATTS

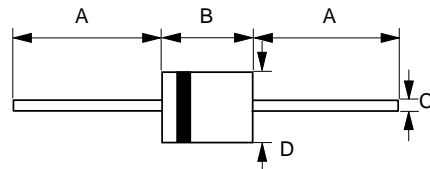
FEATURES

- Glass passivated chip
- Low leakage
- Uni and Bidirectional unit
- Excellent clamping capability
- The plastic material has U/L recognition 94V-0
- Fast response time

MECHANICAL DATA

- Case : Molded Plastic
- Marking : Unidirectional - type number and cathode band Bidirectional - type number only
- Weight : 0.07 ounces, 2.1 grams

R-6



| R-6 | | |
|------------------------------|--------------------|--------------------|
| Dim. | Min. | Max. |
| A | 25.4 | - |
| B | 8.60 | 9.10 |
| C | 1.20 \varnothing | 1.30 \varnothing |
| D | 8.60 \varnothing | 9.10 \varnothing |
| All Dimensions in millimeter | | |

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

| CHARACTERISTICS | SYMBOLS | VALUE | UNIT |
|--|---------|---------------|-------|
| PEAK POWER DISSIPATION AT TA = 25°C, TP = 1ms (Note 1) | PPK | Minimum 15000 | WATTS |
| Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (Note 2) (JEDEC METHOD) | IFSM | 400 | AMPS |
| Steady State Power Dissipation at TL = 75 C lead lengths 0.375" (9.5mm) , see fig.4 | PM(AV) | 8.0 | WATTS |
| Operating Temperature Range | TJ | -55 to +175 | °C |
| Storage Temperature Range | TSTG | -55 to +175 | °C |

NOTES : 1. Non-repetitive current pulse, per fig. 5 and derated above TA= 25 C per fig. 1

2. 8.3ms single half sine-wave duty cycle= 4 pulses per minutes maximum (uni-directional units only).

REV. 1, May-2006, KDIG03

FIG.1 - PULSE DERATING CURVE

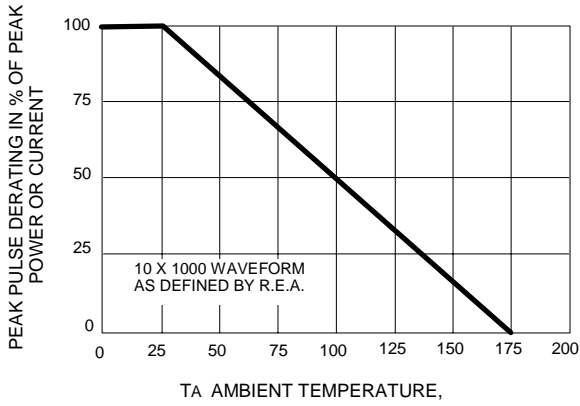


FIG.2 - TYPICAL JUNCTION CAPACITANCE

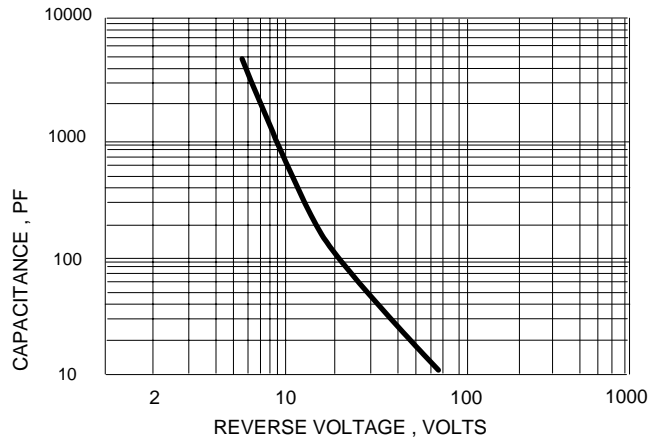


FIG.3 - PULSE RATING CURVE

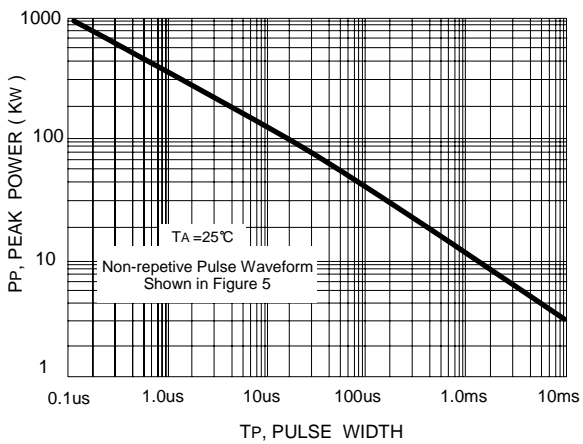


FIG.4 - STEADY STATE POWER DERATING CURVE

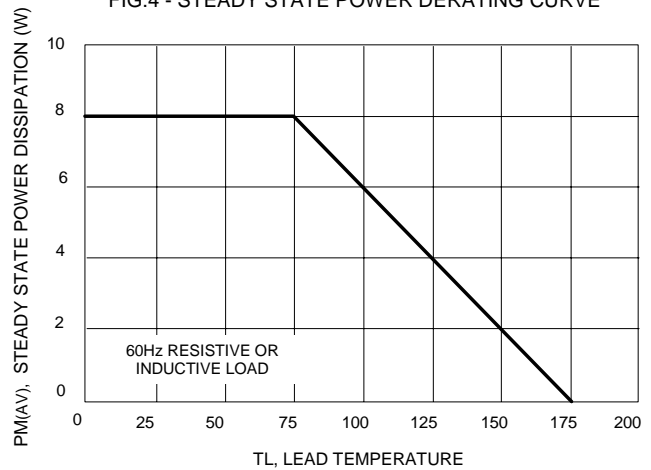
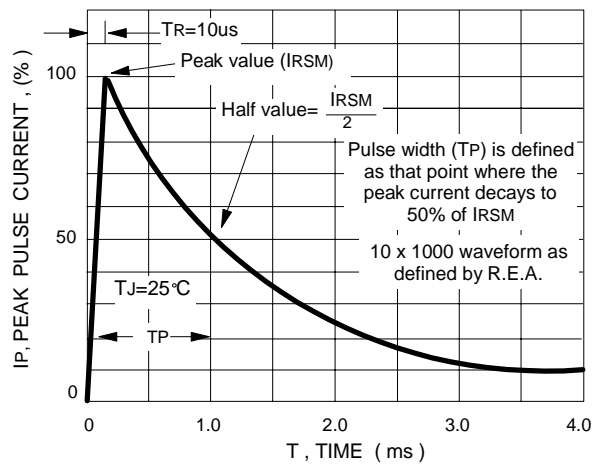


FIG.5 - PULSE WAVEFORM



| Type Number | Type Number | Reverse Standoff Voltage | Breakdown Voltage BV Volts @It | | | Max. Reverse Leakage @VR | Max. Clamping Voltage @Ipp | Max. Peak Pulse Current |
|-------------|-------------|--------------------------|--------------------------------|-------|--------|--------------------------|----------------------------|-------------------------|
| | | | (UNI) | (BI) | VR (V) | | | |
| 15KP15 | 15KP15C | 15.0 | 16.70 | 20.4 | 5 | 15 | 26.9 | 557.6 |
| 15KP15A | 15KP15CA | 15.0 | 16.70 | 18.5 | 5 | 15 | 24.4 | 614.8 |
| 15KP30 | 15KP30C | 30.0 | 33.3 | 40.7 | 5 | 15 | 56.2 | 266.9 |
| 15KP30A | 15KP30CA | 30.0 | 33.3 | 36.8 | 5 | 15 | 50.7 | 295.9 |
| 15KP33 | 15KP33C | 33.0 | 36.7 | 44.8 | 5 | 10 | 60.6 | 247.5 |
| 15KP33A | 15KP33CA | 33.0 | 36.7 | 40.6 | 5 | 10 | 54.8 | 273.7 |
| 15KP36 | 15KP36C | 36.0 | 40.0 | 48.9 | 5 | 10 | 66.0 | 227.3 |
| 15KP36A | 15KP36CA | 36.0 | 40.0 | 44.2 | 5 | 10 | 59.7 | 251.3 |
| 15KP40 | 15KP40C | 40.0 | 44.4 | 54.3 | 5 | 10 | 72.8 | 206.0 |
| 15KP40A | 15KP40CA | 40.0 | 44.4 | 49.1 | 5 | 10 | 65.8 | 228.0 |
| 15KP43 | 15KP43C | 43.0 | 47.8 | 58.4 | 5 | 10 | 77.1 | 194.6 |
| 15KP43A | 15KP43CA | 43.0 | 47.8 | 52.8 | 5 | 10 | 69.7 | 215.2 |
| 15KP45 | 15KP45C | 45.0 | 50.0 | 61.1 | 5 | 10 | 80.7 | 185.9 |
| 15KP45A | 15KP45CA | 45.0 | 50.0 | 55.3 | 5 | 10 | 73.0 | 205.5 |
| 15KP48 | 15KP48 | 48.0 | 53.3 | 65.1 | 5 | 10 | 85.9 | 174.6 |
| 15KP48A | 15KP48CA | 48.0 | 53.3 | 58.9 | 5 | 10 | 77.7 | 193.1 |
| 15KP51 | 15KP51 | 51.0 | 56.7 | 69.3 | 5 | 10 | 91.5 | 163.9 |
| 15KP51A | 15KP51CA | 51.0 | 56.7 | 62.7 | 5 | 10 | 82.8 | 181.2 |
| 15KP54 | 15KP54C | 54.0 | 60.0 | 73.3 | 5 | 10 | 96.8 | 155.0 |
| 15KP54A | 15KP54CA | 54.0 | 60.0 | 66.3 | 5 | 10 | 87.5 | 171.4 |
| 15KP58 | 15KP58C | 58.0 | 64.4 | 78.7 | 5 | 10 | 104.0 | 144.2 |
| 15KP58A | 15KP58CA | 58.0 | 64.4 | 71.2 | 5 | 10 | 94.0 | 159.6 |
| 15KP60 | 15KP60C | 60.0 | 66.7 | 81.5 | 5 | 10 | 107.0 | 140.2 |
| 15KP60A | 15KP60CA | 60.0 | 66.7 | 73.7 | 5 | 10 | 97.3 | 154.2 |
| 15KP64 | 15KP64C | 64.0 | 71.1 | 86.9 | 5 | 10 | 115.0 | 130.4 |
| 15KP64A | 15KP64CA | 64.0 | 71.1 | 78.6 | 5 | 10 | 104.0 | 144.2 |
| 15KP70 | 15KP70C | 70.0 | 77.8 | 95.1 | 5 | 10 | 126.0 | 119.0 |
| 15KP70A | 15KP70CA | 70.0 | 77.8 | 86.0 | 5 | 10 | 114.0 | 131.6 |
| 15KP75 | 15KP75C | 75.0 | 83.3 | 101.8 | 5 | 10 | 135.0 | 111.1 |
| 15KP75A | 15KP75CA | 75.0 | 83.3 | 92.1 | 5 | 10 | 122.0 | 123.0 |
| 15KP78 | 15KP78C | 78.0 | 86.7 | 105.9 | 5 | 10 | 140.0 | 107.1 |
| 15KP78A | 15KP78CA | 78.0 | 86.7 | 95.8 | 5 | 10 | 126.0 | 119.0 |
| 15KP85 | 15KP85C | 85.0 | 94.4 | 115.4 | 5 | 10 | 152.0 | 98.7 |
| 15KP85A | 15KP85CA | 85.0 | 94.4 | 104.3 | 5 | 10 | 137.0 | 109.5 |
| 15KP90 | 15KP90C | 90.0 | 100.0 | 122.2 | 5 | 10 | 160.0 | 93.8 |
| 15KP90A | 15KP90CA | 90.0 | 100.0 | 110.5 | 5 | 10 | 146.0 | 102.7 |
| 15KP100 | 15KP100C | 100.0 | 111.0 | 135.6 | 5 | 10 | 179.0 | 83.8 |
| 15KP110 | 15KP110C | 110.0 | 122.0 | 149.1 | 5 | 10 | 196.0 | 76.5 |
| 15KP120 | 15KP120C | 120.0 | 133.0 | 162.5 | 5 | 10 | 214.0 | 70.1 |
| 15KP130 | 15KP130C | 130.0 | 144.0 | 176.0 | 5 | 10 | 231.0 | 64.9 |
| 15KP150 | 15KP150C | 150.0 | 167.0 | 204.1 | 5 | 10 | 268.0 | 56.0 |
| 15KP160 | 15KP160C | 160.0 | 178.0 | 217.5 | 5 | 10 | 287.0 | 52.3 |
| 15KP170 | 15KP170C | 170.0 | 189.0 | 231.0 | 5 | 10 | 304.0 | 49.3 |
| 15KP180 | 15KP180C | 180.0 | 200.0 | 244.4 | 5 | 10 | 321.0 | 46.7 |
| 15KP200 | 15KP200C | 200.0 | 222.0 | 271.3 | 5 | 10 | 356.0 | 42.1 |

NOTES:

Suffix 'C' denotes bidirectional device. Suffix 'A' denotes 5% tolerance device, no suffix denotes 10% tolerance device .