

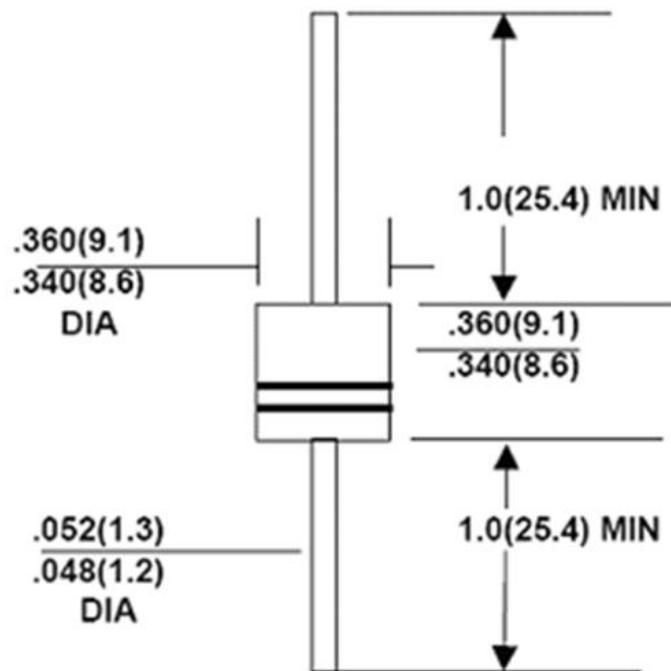
Features:

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass Passivated Junction
- 15000W Peak Pulse Power Capability on 10/1000 μ s waveform
- Voltage-17.0 to 280 Volts
- Excellent Clamping Capability
- Repetition rate (duty cycle): 0.05%
- Low incremental surge resistance
- Fast Response Time: typically less than 1.0 ps from 0 volts to BV
- High temperature soldering guaranteed: 265°C/10 seconds/.375", (9.5mm) lead length, 5lbs., (2.3kg) tension
- This is a Pb – Free Device
- All SMC Parts are Traceable to the Wafer Lot
- Additional testing can be offered upon request

Mechanical Data:

- Case: Molded Plastic over glass passivated junction
- Terminals: Plated Axial leads , Solderable per MIL-STD 750, Method 2026
- Polarity: Color Band denoted positive end (cathode) except Bipolar
- Mounting Position: Any
- Weight:0.064 grams(approx.)

Mechanical Dimensions: In Inches (mm)



P-600

MARKING DIAGRAM



Where XXXXX is YYWWL

15KPA17A = Part Name
YY = Year
WW = Week
L = Lot Number

Cautions: Molding resin
Epoxy resin UL:94V-0

Ordering Information:

| Device | Package | Shipping |
|--------------|----------------|---------------|
| 15KPAxxxXX | P-600(Pb-Free) | 300pcs / box |
| 15KPAxxxXXTR | P-600(Pb-Free) | 800pcs / reel |

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

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

| Parameter | Symbol | Value | Unit |
|------------------------------------------------------------------------------------------------|-----------------------------------|-------------|------------------|
| Peak Pulse Power Dissipation on 10x1000 μs Waveform(Note 1) | P _{PPM} | 15000 | W |
| Peak Pulse Current on 10x1000 μs Waveform(Note 1) | I _{PPM} | See Table 1 | A |
| Steady State Power Dissipation at $T_L=75^\circ\text{C}$ Lead Lengths .375", (9.5mm)(Note 2) | P _{M(AV)} | 8.0 | W |
| Peak Forward Surge Current, 8.3ms Sine-Wave Superimposed on Rated Load, (JEDEC Method)(Note 3) | I _{FSM} | 400.0 | A |
| Operating Junction and Storage Temperature Range | T _J , T _{STG} | -55 to 175 | $^\circ\text{C}$ |

- Notes:**
1. Non-repetitive current pulse, per Fig. 3 and derated above $T_A = 25^\circ\text{C}$ per Fig. 2.
 2. Mounted on copper pad area of 0.8" x 0.8" (20 x 20mm)
 3. 8.3ms single half sine wave, or equivalent square, duty cycle=4 pulses per minute maximum.

Technical Data
Data Sheet N0215, Rev. D
15000 Watt TVS

Green Products

| UNI-POLAR | BI-POLAR | REVERSE STANDOFF VOLTAGE V_{RWM} (V) | BREAKDOWN VOLTAGE V_{BR} (V) MIN. @ I_T | BREAKDOWN VOLTAGE V_{BR} (V) MAX. @ I_T | TEST CURRENT (I_T) mA | MAXIMUM CLAMPING VOLTAGE @ I_{PP} V_c (V) | PEAK PULSE CURRENT I_{PP} (A) | REVERSE LEAKAGE @ V_{RWM} I_R (μ A) |
|-----------|------------|-------------------------------------------------|------------------------------------------------------|------------------------------------------------------|------------------------------------|--------------------------------------------------------|------------------------------------------|-------------------------------------------------------|
| 15KPA17A | 15KPA17CA | 17 | 18.99 | 20.79 | 50 | 29.3 | 515.4 | 5000 |
| 15KPA18A | 15KPA18CA | 18 | 20.11 | 22.01 | 50 | 30.9 | 488.7 | 5000 |
| 15KPA20A | 15KPA20CA | 20 | 22.34 | 24.46 | 20 | 34.3 | 440.2 | 1500 |
| 15KPA22A | 15KPA22CA | 22 | 24.57 | 26.91 | 10 | 37.1 | 407.0 | 500 |
| 15KPA24A | 15KPA24CA | 24 | 26.81 | 29.35 | 5 | 40.7 | 371.0 | 150 |
| 15KPA26A | 15KPA26CA | 26 | 29.04 | 31.80 | 5 | 44.0 | 343.2 | 50 |
| 15KPA28A | 15KPA28CA | 28 | 31.28 | 34.24 | 5 | 47.5 | 317.9 | 25 |
| 15KPA30A | 15KPA30CA | 30 | 33.51 | 36.70 | 5 | 50.7 | 297.8 | 15 |
| 15KPA33A | 15KPA33CA | 33 | 36.90 | 40.40 | 5 | 54.7 | 276.1 | 2 |
| 15KPA36A | 15KPA36CA | 36 | 40.20 | 44.00 | 5 | 59.8 | 252.5 | 2 |
| 15KPA40A | 15KPA40CA | 40 | 44.70 | 48.90 | 5 | 65.8 | 229.5 | 2 |
| 15KPA43A | 15KPA43CA | 43 | 48.00 | 52.60 | 5 | 69.8 | 216.3 | 2 |
| 15KPA45A | 15KPA45CA | 45 | 50.30 | 55.00 | 5 | 72.8 | 207.4 | 2 |
| 15KPA48A | 15KPA48CA | 48 | 53.60 | 58.70 | 5 | 77.7 | 194.3 | 2 |
| 15KPA51A | 15KPA51CA | 51 | 57.00 | 62.40 | 5 | 82.8 | 182.1 | 2 |
| 15KPA54A | 15KPA54CA | 54 | 60.30 | 66.00 | 5 | 87.7 | 172.2 | 2 |
| 15KPA58A | 15KPA58CA | 58 | 64.80 | 70.90 | 5 | 93.8 | 161.0 | 2 |
| 15KPA60A | 15KPA60CA | 60 | 67.00 | 73.40 | 5 | 97.4 | 155.0 | 2 |
| 15KPA64A | 15KPA64CA | 64 | 71.50 | 78.30 | 5 | 104.2 | 144.9 | 2 |
| 15KPA70A | 15KPA70CA | 70 | 78.20 | 85.60 | 5 | 113.6 | 132.9 | 2 |
| 15KPA75A | 15KPA75CA | 75 | 83.80 | 91.70 | 5 | 122.0 | 123.8 | 2 |
| 15KPA78A | 15KPA78CA | 78 | 87.10 | 95.40 | 5 | 126.1 | 119.7 | 2 |
| 15KPA85A | 15KPA85CA | 85 | 94.90 | 104.00 | 5 | 137.6 | 109.7 | 2 |
| 15KPA90A | 15KPA90CA | 90 | 100.50 | 110.10 | 5 | 145.6 | 103.7 | 2 |
| 15KPA100A | 15KPA100CA | 100 | 111.70 | 122.30 | 5 | 161.3 | 93.6 | 2 |
| 15KPA110A | 15KPA110CA | 110 | 122.90 | 134.50 | 5 | 178.6 | 84.5 | 2 |
| 15KPA120A | 15KPA120CA | 120 | 134.00 | 146.80 | 5 | 192.3 | 78.5 | 2 |
| 15KPA130A | 15KPA130CA | 130 | 145.20 | 159.00 | 5 | 208.3 | 72.5 | 2 |
| 15KPA150A | 15KPA150CA | 150 | 167.60 | 183.50 | 5 | 241.9 | 62.4 | 2 |
| 15KPA160A | 15KPA160CA | 160 | 178.70 | 195.70 | 5 | 258.6 | 58.4 | 2 |
| 15KPA170A | 15KPA170CA | 170 | 189.90 | 207.90 | 5 | 272.7 | 55.4 | 2 |
| 15KPA180A | 15KPA180CA | 180 | 201.10 | 220.10 | 5 | 288.5 | 52.3 | 2 |
| 15KPA200A | 15KPA200CA | 200 | 223.40 | 244.60 | 5 | 319.1 | 47.3 | 2 |
| 15KPA220A | 15KPA220CA | 220 | 245.70 | 269.10 | 5 | 428.6 | 35.2 | 2 |
| 15KPA240A | 15KPA240CA | 240 | 268.10 | 293.50 | 5 | 384.6 | 39.3 | 2 |
| 15KPA260A | 15KPA260CA | 260 | 290.40 | 318.00 | 5 | 416.7 | 36.2 | 2 |
| 15KPA280A | 15KPA280CA | 280 | 312.80 | 342.40 | 5 | 454.5 | 33.2 | 2 |

For bidirectional type having V_{RWM} of 30 volts and less, the I_R limit is double.
For parts without A, the V_{BR} is + 10% and V_c is 5% higher than with A parts

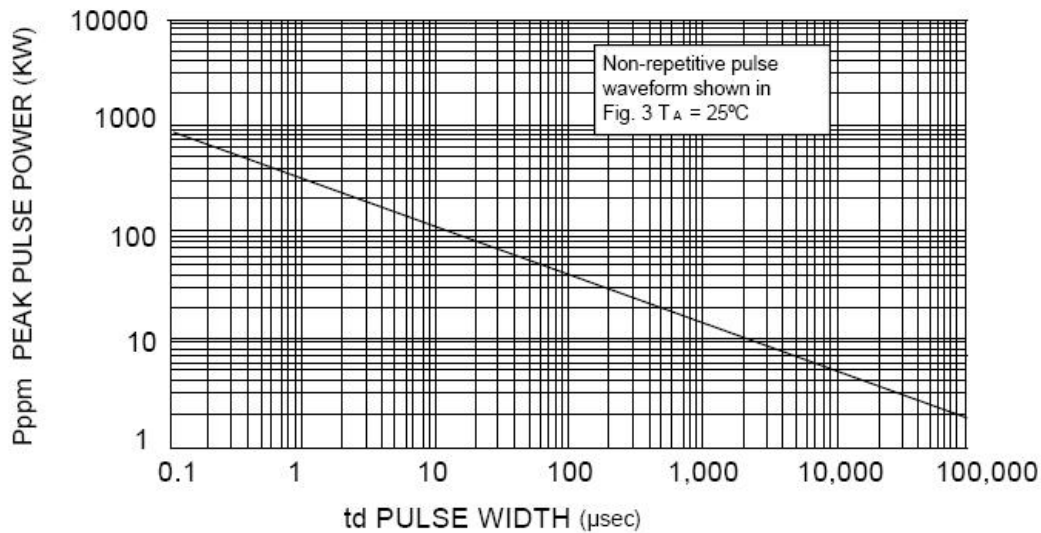


FIG. 1 PEAK PULSE POWER RATING

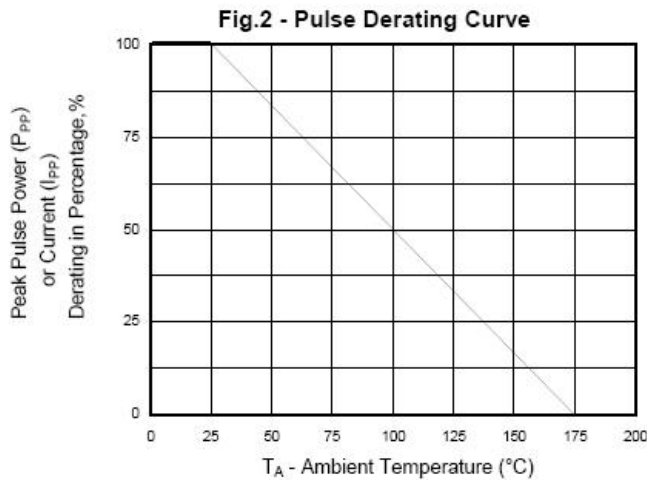
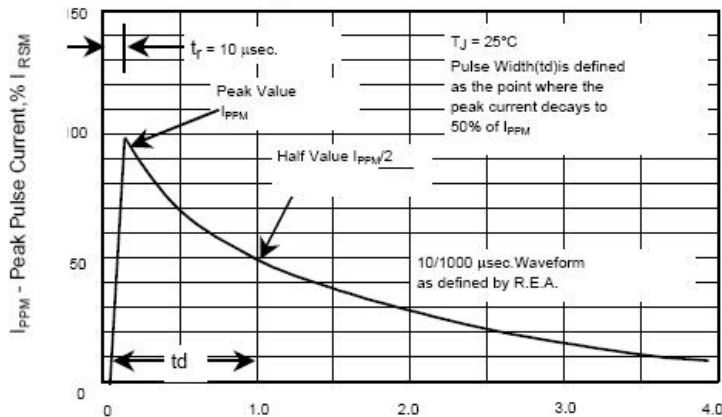


Fig.3 - Pulse Waveform





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