

TVS Diodes - 15000 Watt Specifications - 15KP Series Electrical Characteristics

| Part Number* | Rated Standoff Voltage Vwm | Breakdown Voltage | | Maximum Stand By Current @Vwm+ Id | 10/1000μs Maximum Clamping Voltage @Ippm# Vc Max | 10/1000μs Rated Peak Impulse Current Ippm# |
|-----------------|-------------------------------------|-------------------|------|-----------------------------------------------|-----------------------------------------------------------------|--------------------------------------------------------|
| | | Vbr (Volts) | @It | | | |
| | (Volts) | Min | (mA) | (μA) | (Volts) | (Amperes) |
| 15KP17 | 17 | 18.9 | 50 | 5000 | 32.2 | 464.0 |
| 15KP17A | 17 | 18.9 | 50 | 5000 | 29.3 | 512.0 |
| 15KP18 | 18 | 20.0 | 50 | 5000 | 34.2 | 439.0 |
| 15KP18A | 18 | 20.0 | 50 | 5000 | 30.9 | 485.0 |
| 15KP20 | 20 | 22.2 | 20 | 1500 | 37.9 | 396.0 |
| 15KP20A | 20 | 22.2 | 20 | 1500 | 34.3 | 437.0 |
| 15KP22 | 22 | 24.4 | 10 | 500 | 41.1 | 365.0 |
| 15KP22A | 22 | 24.4 | 10 | 500 | 37.1 | 404.0 |
| 15KP24 | 24 | 26.7 | 5 | 150 | 45.0 | 333.0 |
| 15KP24A | 24 | 26.7 | 5 | 150 | 40.7 | 369.0 |
| 15KP26 | 26 | 28.9 | 5 | 50 | 48.7 | 308.0 |
| 15KP26A | 26 | 28.9 | 5 | 50 | 44.0 | 341.0 |
| 15KP28 | 28 | 31.1 | 5 | 25 | 52.4 | 286.0 |
| 15KP28A | 28 | 31.1 | 5 | 25 | 47.5 | 316.0 |
| 15KP30 | 30 | 33.3 | 5 | 15 | 56.2 | 267.0 |
| 15KP30A | 30 | 33.3 | 5 | 15 | 50.7 | 296.0 |
| 15KP33 | 33 | 36.7 | 5 | 10 | 60.6 | 248.0 |
| 15KP33A | 33 | 36.7 | 5 | 10 | 54.8 | 274.0 |
| 15KP36 | 36 | 40.0 | 5 | 10 | 66.0 | 227.0 |
| 15KP36A | 36 | 40.0 | 5 | 10 | 59.7 | 251.0 |
| 15KP40 | 40 | 44.4 | 5 | 10 | 72.8 | 206.0 |
| 15KP40A | 40 | 44.4 | 5 | 10 | 65.8 | 228.0 |
| 15KP43 | 43 | 47.8 | 5 | 10 | 77.1 | 195.0 |
| 15KP43A | 43 | 47.8 | 5 | 10 | 69.7 | 215.0 |
| 15KP45 | 45 | 50.0 | 5 | 10 | 80.7 | 186.0 |
| 15KP45A | 45 | 50.0 | 5 | 10 | 73.0 | 205.0 |
| 15KP48 | 48 | 53.3 | 5 | 10 | 85.9 | 175.0 |
| 15KP48A | 48 | 53.3 | 5 | 10 | 77.7 | 193.0 |

* = Add "C" or "CA" suffix for bidirectional device types.

= See General Information for Impulse Current Waveform.

TVS Diodes - 15000 Watt Specifications - 15KP Series Electrical Characteristics - (Continued)

| Part Number* | Rated Standoff Voltage Vwm | Breakdown Voltage | | Maximum Stand By Current @Vwm+ Id | 10/1000μs Maximum Clamping Voltage @Ippm# Vc Max | 10/1000μs Rated Peak Impulse Current Ippm# |
|-----------------|-------------------------------------|-------------------|------|-----------------------------------------------|-----------------------------------------------------------------|--------------------------------------------------------|
| | | Vbr (Volts) | @It | | | |
| | (Volts) | Min | (mA) | (μA) | (Volts) | (Amperes) |
| 15KP51 | 51 | 56.7 | 5 | 10 | 91.5 | 164.0 |
| 15KP51A | 51 | 56.7 | 5 | 10 | 82.8 | 181.0 |
| 15KP54 | 54 | 60.0 | 5 | 10 | 96.8 | 155.0 |
| 15KP54A | 54 | 60.0 | 5 | 10 | 87.5 | 171.0 |
| 15KP58 | 58 | 64.4 | 5 | 10 | 104.0 | 144.0 |
| 15KP58A | 58 | 64.4 | 5 | 10 | 94.0 | 160.0 |
| 15KP60 | 60 | 66.7 | 5 | 10 | 107.0 | 140.0 |
| 15KP60A | 60 | 66.7 | 5 | 10 | 97.3 | 154.0 |
| 15KP64 | 64 | 71.1 | 5 | 10 | 115.0 | 130.0 |
| 15KP64A | 64 | 71.1 | 5 | 10 | 104.0 | 144.0 |
| 15KP70 | 70 | 77.8 | 5 | 10 | 126.0 | 119.0 |
| 15KP70A | 70 | 77.8 | 5 | 10 | 114.0 | 132.0 |
| 15KP75 | 75 | 83.3 | 5 | 10 | 135.0 | 111.0 |
| 15KP75A | 75 | 83.3 | 5 | 10 | 122.0 | 123.0 |
| 15KP78 | 78 | 86.7 | 5 | 10 | 140.0 | 107.0 |
| 15KP78A | 78 | 86.7 | 5 | 10 | 126.0 | 119.0 |
| 15KP85 | 85 | 94.4 | 5 | 10 | 152.0 | 99.0 |
| 15KP85A | 85 | 94.4 | 5 | 10 | 137.0 | 109.0 |
| 15KP90 | 90 | 100.0 | 5 | 10 | 160.0 | 94.0 |
| 15KP90A | 90 | 100.0 | 5 | 10 | 146.0 | 103.0 |
| 15KP100 | 100 | 111.0 | 5 | 10 | 179.0 | 84.0 |
| 15KP110 | 110 | 122.0 | 5 | 10 | 196.0 | 77.0 |
| 15KP120 | 120 | 133.0 | 5 | 10 | 214.0 | 70.0 |
| 15KP130 | 130 | 144.0 | 5 | 10 | 231.0 | 65.0 |

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TVS Diodes - 15000 Watt Specifications - 15KP Series Electrical Characteristics - (Continued)

| Part Number* | Rated Standoff Voltage V _{wm} (Volts) | Breakdown Voltage | | Maximum Stand By Current @V _{wm} + I _d (μA) | 10/1000μs Maximum Clamping Voltage @I _{ppm} # V _c Max (Volts) | 10/1000μs Rated Peak Impulse Current I _{ppm} # (Amperes) |
|-----------------|------------------------------------------------------------|--------------------------------|-------------------------|--------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| | | V _{br} (Volts) Min | @I _t (mA) | | | |
| 15KP150 | 150 | 167.0 | 5 | 10 | 268.0 | 56.0 |
| 15KP160 | 160 | 178.0 | 5 | 10 | 287.0 | 52.0 |
| 15KP170 | 170 | 189.0 | 5 | 10 | 304.0 | 49.0 |
| 15KP180 | 180 | 200.0 | 5 | 10 | 321.0 | 47.0 |
| 15KP200 | 200 | 222.0 | 5 | 10 | 356.0 | 42.0 |
| 15KP220 | 220 | 245.0 | 5 | 10 | 393.0 | 38.0 |
| 15KP240 | 240 | 267.0 | 5 | 10 | 428.0 | 35.0 |
| 15KP260 | 260 | 289.0 | 5 | 10 | 464.0 | 32.0 |
| 15KP280 | 280 | 311.0 | 5 | 10 | 500.0 | 30.0 |

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TVS Diodes - 15000 Watt - 15KP Series Features

15KP Series Features

- 15000 watt peak pulse power dissipation
- Available in voltages from 30V to 200V
- Unidirectional and Bidirectional
- Glass passivated junction
- Low clamping factor
- Each device 100% surge tested
- Available in bulk or tape and reel (Reel quantity = 1,000 pieces)
- UL 497B Recognized, File # E135015

Absolute Maximum Ratings

- Peak pulse power dissipation (Pppm) at 25°C..... 15000W
- Steady state power dissipation at lead temperature = 75°C (Lead length 3/8" min.)..... 5W
- Operating and storage temperatures..... -65°C to + 175°C

Mechanical Dimensions

