



Transient Voltage Suppression Diodes

3KP Series

Axial Type

3000 Watt Specifications

[Features](#) | [Absolute Maximum Ratings](#) | [Mechanical Dimensions](#) | [Standard Mounting Pad Layout](#) | [Electrical Characteristics](#)

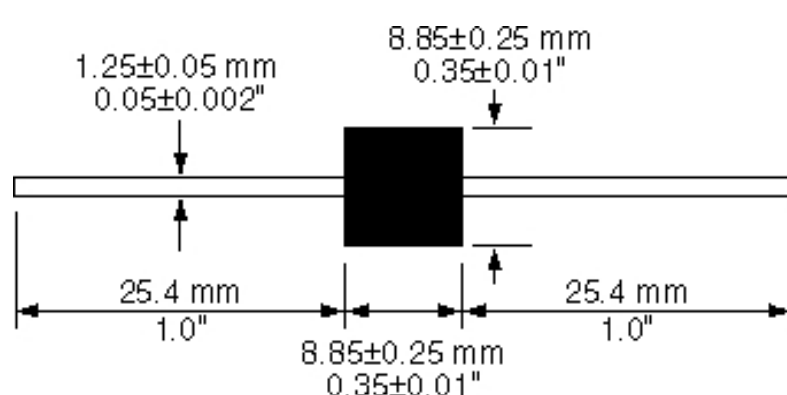
Features

- ? RoHS Compliance Standard
- ? 3000 watt peak pulse power dissipation
- ? Available in voltages from 10V to 220V
- ? Unidirectional and Bidirectional
- ? Glass passivated junction
- ? Low clamping factor
- ? Available in bulk or tape and reel (Reel quantity = 800 pieces)
- ? Each device 100% surge tested
- ? UL 497B Recognized, File # E135015
- ? Tape and Reel to EIA Standard RS-296-E

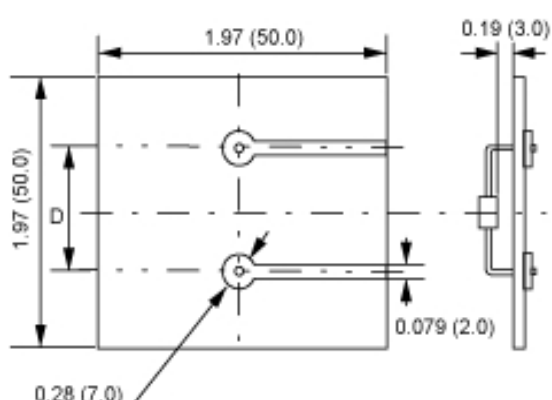
Absolute Maximum Ratings

Parameter	Value
Peak pulse power dissipation (P _{ppm}) at 25°C	3000W
Steady state power dissipation at lead temperature = 75°C (Lead length 3/8" min.)	8W
Operating and storage temperatures	-55°C to + 175°C

Mechanical Dimensions



Standard Mounting Pad Layout



NOTE: Dimension D
a.) 1.5KE (DO-201 Package) - 0.611 (15.5)
b.) 3KP / 5KP / 15KP (R-6 Package) - 0.673 (17.1)
Hole Diameter
a.) 0.059 (1.5)

All dimensions in inches and (millimeters)

Electrical Characteristics

Part Number*	Rated Standoff Voltage	Breakdown Voltage			Maximum Stand By Current @ VWM+ ID (µ A)	10/1000µ s Maximum Clamping Voltage @ IPPM# VC Max (Volts)	10/1000µ s Rated Peak Impulse Current I PPM# (Amperes)
		VBR (Volts)		@IT (mA)			
		Min	Max				
3KP10	10.00	11.10	14.10	1	5	18.8	159.6
3KP10A	10.00	11.10	12.80	1	5	17.0	176.4
3KP11	11.00	12.20	15.40	1	5	20.1	149.2
3KP11A	11.00	12.20	14.00	1	5	18.2	184.8
3KP12	12.00	13.30	16.90	1	5	22.0	136.4
3KP12A	12.00	13.30	15.30	1	5	19.9	150.6
3KP13	13.00	14.40	18.20	1	5	23.8	126.0
3KP13A	13.00	14.40	16.50	1	5	21.5	139.4
3KP14	14.00	15.60	19.80	1	5	25.8	116.2
3KP14A	14.00	15.60	17.90	1	5	23.2	129.4
3KP15	15.00	16.70	21.10	1	5	26.9	111.6
3KP15A	15.00	16.70	19.20	1	5	24.4	123.0
3KP16	16.00	17.80	22.60	1	5	28.8	104.2
3KP16A	16.00	17.80	20.50	1	5	26.0	115.4
3KP17	17.00	18.90	23.90	1	5	30.5	98.4
3KP17A	17.00	18.90	21.70	1	5	27.6	106.6
3KP18	18.00	20.00	25.30	1	5	32.2	93.2
3KP18A	18.00	20.00	23.30	1	5	29.2	102.8
3KP20	20.00	22.20	28.10	1	5	35.8	83.8
3KP20A	20.00	22.20	25.50	1	5	32.4	92.6
3KP22	22.00	24.40	30.90	1	5	39.4	76.2
3KP22A	22.00	24.40	28.00	1	5	35.5	84.4
3KP24	24.00	26.70	33.80	1	5	43.0	69.8
3KP24A	24.00	26.70	30.70	1	5	38.9	77.2
3KP26	26.00	28.90	36.60	1	5	46.6	64.4
3KP26A	26.00	28.90	33.20	1	5	42.1	71.2
3KP28	28.00	31.10	39.40	1	5	50.0	60.0
3KP28A	28.00	31.10	35.80	1	5	45.4	66.0
3KP30	30.00	33.30	42.20	1	5	53.5	56.0
3KP30A	30.00	33.30	38.30	1	5	48.4	62.0
3KP33	33.00	36.70	46.50	1	5	59.0	50.4
3KP33A	33.00	36.70	42.20	1	5	53.3	56.2
3KP36	36.00	40.00	50.70	1	5	64.3	46.6
3KP36A	36.00	40.00	46.00	1	5	58.1	51.6
3KP40	40.00	44.40	53.30	1	5	71.4	42.0
3KP40A	40.00	44.40	51.10	1	5	64.5	46.4
3KP43	43.00	47.80	60.50	1	5	76.7	39.2
3KP43A	43.00	47.80	54.90	1	5	69.4	43.2
3KP45	45.00	50.00	63.30	1	5	80.3	37.4
3KP45A	45.00	50.00	57.50	1	5	72.7	41.2
3KP48	48.00	53.30	67.50	1	5	85.5	35.0
3KP48A	48.00	53.30	61.30	1	5	77.4	38.8
3KP51	51.00	56.70	71.80	1	5	91.1	37.0
3KP51A	51.00	56.70	65.20	1	5	82.4	36.4
3KP54	54.00	60.00	76.00	1	5	96.3	31.2
3KP54A	54.00	60.00	69.00	1	5	87.1	34.4
3KP58	58.00	64.40	81.60	1	5	103.0	29.2
3KP58A	58.00	64.40	74.10	1	5	93.6	32.0
3KP60	60.00	66.70	84.50	1	5	107.0	28.0
3KP60A	60.00	66.70	76.70	1	5	96.8	31.0
3KP64	64.00	71.10	90.10	1	5	114.0	26.4
3KP64A	64.00	71.10	81.80	1	5	103.0	29.2
3KP70	70.00	77.80	98.60	1	5	125.0	24.0
3KP70A	70.00	77.80	89.50	1	5	113.0	26.6
3KP75	75.00	83.30	105.70	1	5	134.0	22.4
3KP75A	75.00	83.30	98.80	1	5	121.0	24.8
3KP78	78.00	86.70	109.80	1	5	139.0	21.6
3KP78A	78.00	86.70	99.70	1	5	126.0	22.8
3KP85	85.00	94.40	119.20	1	5	151.0	19.8
3KP85A	85.00	94.40	108.20	1	5	137.0	20.8
3KP90	90.00	100.00	126.50	1	5	160.0	18.8
3KP90A	90.00	100.00	115.50	1	5	146.0	20.6
3KP100	100.00	111.00	141.00	1	5	179.0	16.6
3KP100A	100.00	111.00	128.00	1	5	162.0	18.6
3KP110	110.00	122.00	154.50	1	5	196.0	15.4
3KP110A	110.00	122.00	140.50	1	5	177.0	16.8
3KP120	120.00	133.00	169.00	1	5	214.0	14.0
3KP120A	120.00	133.00	153.00	1	5	193.0	15.6
3KP130	130.00	144.00	182.50	1	5	231.0	13.0
3KP130A	130.00	144.00	165.50	1	5	209.0	14.4
3KP150	150.00	167.00	211.50	1	5	268.0	11.2
3KP150A	150.00	167.00	192.50	1	5	243.0	12.4
3KP160	160.00	178.00	226.00	1	5	287.0	10.4
3KP160A	160.00	178.00	205.00	1	5	259.0	11.6
3KP170	170.00	189.00	239.50	1	5	304.0	9.8
3KP170A	170.00	189.00	217.50	1	5	275.0	11.0

Add "C" or "CA" suffix for bidirectional device types.
+ = For Bidirectional Types Having VWM <= 10V, their ID limit is doubled.
= See General Information for Impulse Current Waveform.

[Back to top](#)

[Back to TVS Diodes](#)

[Home](#)

World Products, LLC, 19654 8th St. East, Sonoma, CA 95476 USA
Phone: (707) 996 -5201 Fax: (707) 996 -3380 E-mail: sales@worldproducts.com

© 2010 World Products, LLC. All rights reserved. [Disclaimer.](#)