

1.5KE Series — 1500 Watt



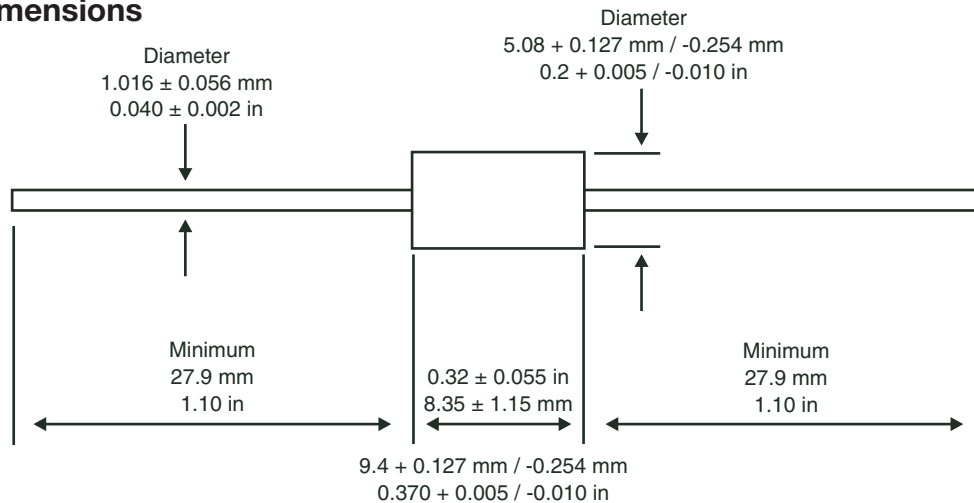
1.5KE Series Features

- RoHS Compliance Standard
- 1500 watt peak pulse power dissipation
- Available in voltages from 6.8V to 400V
- Unidirectional and Bidirectional
- Glass passivated junction
- Low clamping factor
- Available in bulk or tape and reel (Reel quantity = 1,200 pieces)
- Each device 100% surge tested
- Metal hermetically sealed (DO13) version of this diode is available upon request
- UL 497B Recognized, File # E135015 (6.8V - 300V)
- Tape and Reel to EIA Standard RS-296-E

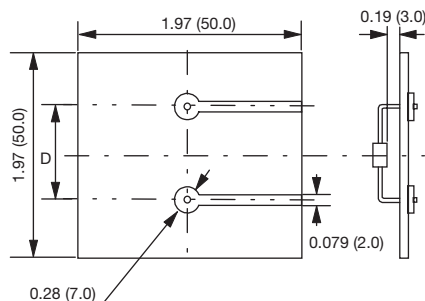
Absolute Maximum Ratings

Parameter	Value
Peak pulse power dissipation (PPPM) at 25°C	1500W
Steady state power dissipation at lead temperature = 75°C (Lead length 3/8" min.)	5W
Operating and storage temperatures	-55°C to + 175°C

Mechanical Dimensions



Standard Mounting Pad Layout



NOTE: Dimension D

- 1.5KE (DO-201 Package) - 0.611 (15.5)
- 3KP / 5KP / 15KP (R-6 Package) - 0.673 (17.1)

Hole Diameter

- 0.059 (1.5)

All dimensions in inches and (millimeters)

1.5KE Series — 1500 Watt**Electrical Characteristics**

Part Number*	Rated Standoff Voltage	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			
	Vwm (Volts)	Min	Max	(mA)	(µA)	(Volts)	(Amperes)
1.5KE6.8	5.50	6.12	7.48	10	1000	10.8	139.0
1.5KE6.8A	5.80	6.45	7.14	10	1000	10.5	143.0
1.5KE7.5	6.05	6.75	8.25	10	500	11.7	128.0
1.5KE7.5A	6.40	7.13	7.88	10	500	11.3	132.0
1.5KE8.2	6.63	7.38	9.02	10	200	12.5	120.0
1.5KE8.2A	7.02	7.79	8.61	10	200	12.1	124.0
1.5KE9.1	7.37	8.19	10.0	1	50	13.8	109.0
1.5KE9.1A	7.78	8.65	9.55	1	50	13.4	112.0
1.5KE10	8.10	9.00	11.0	1	10	15.0	100.0
1.5KE10A	8.55	9.5	10.5	1	10	14.5	103.0
1.5KE11	8.92	9.9	12.1	1	5	16.2	93.0
1.5KE11A	9.40	10.5	11.6	1	5	15.6	96.0
1.5KE12	9.72	10.8	13.2	1	5	17.3	87.0
1.5KE12A	10.2	11.4	12.6	1	5	16.7	90.0
1.5KE13	10.5	11.7	14.3	1	5	19.0	79.0
1.5KE13A	11.1	12.4	13.7	1	5	18.2	82.0
1.5KE15	12.1	13.5	16.5	1	5	22.0	68.0
1.5KE15A	12.8	14.3	15.8	1	5	21.2	71.0
1.5KE16	12.9	14.4	17.6	1	5	23.5	64.0
1.5KE16A	13.6	15.2	16.8	1	5	22.5	67.0
1.5KE18	14.5	16.2	19.8	1	5	26.5	56.5
1.5KE18A	15.3	17.1	18.9	1	5	25.2	59.5
1.5KE20	16.2	18.0	22.0	1	5	29.1	51.5
1.5KE20A	17.1	19.0	21.0	1	5	27.7	54.0
1.5KE22	17.8	19.8	24.2	1	5	31.9	47.0
1.5KE22A	18.8	20.9	23.1	1	5	30.6	49.0
1.5KE24	19.4	21.6	26.4	1	5	34.7	43.0
1.5KE24A	20.5	22.8	25.2	1	5	33.2	45.0
1.5KE27	21.8	24.3	29.7	1	5	39.1	38.5

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

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= See General Information for Impulse Current Waveform.

1.5KE Series — 1500 Watt**Electrical Characteristics (continued)**

Part Number*	Rated Standoff Voltage	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			
	Vwm (Volts)	Min	Max	(mA)	(µA)	(Volts)	(Amperes)
1.5KE27A	23.1	25.7	28.4	1	5	37.5	40.0
1.5KE30	24.3	27.0	33.0	1	5	43.5	34.5
1.5KE30A	25.6	28.5	31.5	1	5	41.4	36.0
1.5KE33	26.8	29.7	36.3	1	5	47.7	31.5
1.5KE33A	28.2	31.4	34.7	1	5	45.7	33.0
1.5KE36	29.1	32.4	39.6	1	5	52.0	29.0
1.5KE36A	30.8	34.2	37.8	1	5	49.9	30.0
1.5KE39	31.6	35.1	42.9	1	5	56.4	26.5
1.5KE39A	33.3	37.1	41.0	1	5	53.9	28.0
1.5KE43	34.8	38.7	47.3	1	5	61.9	24.0
1.5KE43A	36.8	40.9	45.2	1	5	59.3	25.3
1.5KE47	38.1	42.3	51.7	1	5	67.8	22.2
1.5KE47A	40.2	44.7	49.4	1	5	64.8	23.2
1.5KE51	41.3	45.9	56.1	1	5	73.5	20.4
1.5KE51A	43.6	48.5	53.6	1	5	70.1	21.4
1.5KE56	45.4	50.4	61.6	1	5	80.5	18.6
1.5KE56A	47.8	53.2	58.8	1	5	77.0	19.5
1.5KE62	50.2	55.8	68.2	1	5	89.0	16.9
1.5KE62A	53.0	58.9	65.1	1	5	85.0	17.7
1.5KE68	55.1	61.2	74.8	1	5	98.0	15.3
1.5KE68A	58.1	64.6	71.4	1	5	92.0	16.3
1.5KE75	60.7	67.5	82.5	1	5	108.0	13.9
1.5KE75A	64.1	71.3	78.8	1	5	103.0	14.6
1.5KE82	66.4	73.8	90.2	1	5	118.0	12.7
1.5KE82A	70.1	77.9	86.1	1	5	113.0	13.3
1.5KE91	73.7	81.9	100.0	1	5	131.0	11.4
1.5KE91A	77.8	86.5	95.5	1	5	125.0	12.0
1.5KE100	81.0	90.0	110.0	1	5	144.0	10.4
1.5KE100A	85.5	95.0	105.0	1	5	137.0	11.0

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Part Number*	Rated Standoff Voltage	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			
	Vwm (Volts)	Min	Max	(mA)	(µA)	(Volts)	(Amperes)
1.5KE110	89.2	99.0	121.0	1	5	158.0	9.5
1.5KE110A	94.0	105.0	116.0	1	5	152.0	9.9
1.5KE120	97.2	108.0	132.0	1	5	173.0	8.7
1.5KE120A	102.0	114.0	126.0	1	5	165.0	9.1
1.5KE130	105.0	117.0	143.0	1	5	187.0	8.0
1.5KE130A	111.0	124.0	137.0	1	5	179.0	8.4
1.5KE150	121.0	135.0	165.0	1	5	215.0	7.0
1.5KE150A	128.0	143.0	158.0	1	5	207.0	7.2
1.5KE160	130.0	144.0	176.0	1	5	230.0	6.5
1.5KE160A	136.0	152.0	168.0	1	5	219.0	6.8
1.5KE170	138.0	153.0	187.0	1	5	244.0	6.2
1.5KE170A	145.0	162.0	179.0	1	5	234.0	6.4
1.5KE180	146.0	162.0	198.0	1	5	258.0	5.8
1.5KE180A	154.0	171.0	189.0	1	5	246.0	6.1
1.5KE200	162.0	180.0	220.0	1	5	287.0	5.2
1.5KE200A	171.0	190.0	210.0	1	5	274.0	5.5
1.5KE220	175.0	198.0	242.0	1	5	344.0	4.3
1.5KE220A	185.0	209.0	231.0	1	5	328.0	4.6
1.5KE250	202.0	225.0	275.0	1	5	360.0	5.0
1.5KE250A	214.0	237.0	263.0	1	5	344.0	5.0
1.5KE300	243.0	270.0	330.0	1	5	430.0	5.0
1.5KE300A	256.0	285.0	315.0	1	5	414.0	5.0
1.5KE350	284.0	315.0	385.0	1	5	504.0	4.0
1.5KE350A	300.0	332.0	368.0	1	5	482.0	4.0
1.5KE400	324.0	360.0	440.0	1	5	574.0	4.0
1.5KE400A	342.0	380.0	420.0	1	5	548.0	4.0
1.5KE440	356.0	396.0	484.0	1	5	631.0	2.4
1.5KE440A	376.0	418.0	462.0	1	5	600.0	2.6

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