

P4KE Series – 400 Watt



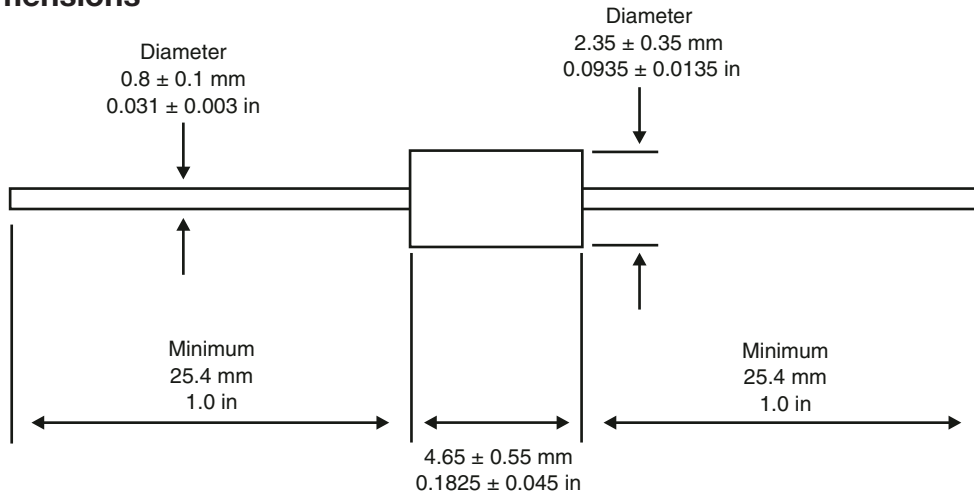
P4KE Series Features

- RoHS Compliance Standard
- 400 watt peak pulse power dissipation
- Available in voltages from 6.8V to 440V
- Unidirectional and Bidirectional
- Glass passivated junction
- Low clamping factor
- Available in bulk or tape and reel (Reel quantity = 5,000 pieces)
- Each device 100% surge tested
- Tape and Reel to EIA Standard RS-296-E
- UL 497B Recognized, File #E135015

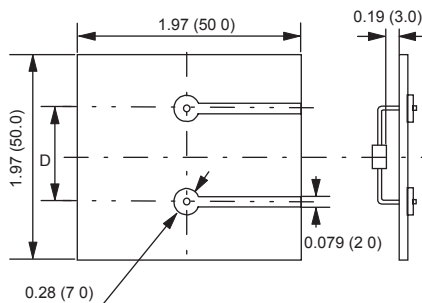
Absolute Maximum Ratings

Parameter	Value
Peak pulse power dissipation (PPPM) at 25°C	400W
Steady state power dissipation at lead temperature = 75°C (Lead length 3/8" min.)	1W
Operating and storage temperatures	-65°C to + 175°C

Mechanical Dimensions



Standard Mounting Pad Layout



NOTE: **Dimension D**
 a.) P4KE (DO-41 Package) - 0.362 (9.2)
 b.) SA / P6KE (DO-15 Package) - 0.437 (11.6)
Hole Diameter
 a.) 0.044 (1.1)

All dimensions in inches and (millimeters)

P4KE Series – 400 Watt**Electrical Characteristics**

Part Number*	Rated Standoff Voltage	Breakdown Voltage			Maximum Stand By Current @VWM+ Id	10/1000 μ s Maximum Clamping Voltage @Ippm# Vc Max	10/1000 μ s Rated Peak Impulse Current Ippm#
		Vbr (Volts)		@It			
	Vwm (Volts)	Min	Max	(mA)	(μ A)	(Volts)	(Amperes)
P4KE6.8	5.50	6.12	7.48	10	1000	10.8	38.0
P4KE6.8A	5.80	6.45	7.14	10	1000	10.5	40.0
P4KE7.5	6.05	6.75	8.25	10	500	11.7	36.0
P4KE7.5A	6.40	7.13	7.88	10	500	11.3	37.0
P4KE8.2	6.63	7.38	9.02	10	200	12.5	33.0
P4KE8.2A	7.02	7.79	8.61	10	200	12.1	35.0
P4KE9.1	7.37	8.19	10.00	1	50	13.8	30.0
P4KE9.1A	7.78	8.65	9.55	1	50	13.4	31.0
P4KE10	8.10	9.00	11.00	1	10	15.0	28.0
P4KE10A	8.55	9.50	10.50	1	10	14.5	29.0
P4KE11	8.92	9.90	12.10	1	5	16.2	26.0
P4KE11A	9.40	10.50	11.60	1	5	15.6	27.0
P4KE12	9.72	10.80	13.20	1	5	17.3	24.0
P4KE12A	10.20	11.40	12.60	1	5	16.7	25.0
P4KE13	10.50	11.70	14.30	1	5	19.0	22.0
P4KE13A	11.10	12.40	13.70	1	5	18.2	23.0
P4KE15	12.10	13.50	16.50	1	5	22.0	19.0
P4KE15A	12.80	14.30	15.80	1	5	21.2	20.0
P4KE16	12.90	14.40	17.60	1	5	23.5	18.0
P4KE16A	13.60	15.20	16.80	1	5	22.5	19.0
P4KE18	14.50	16.20	19.80	1	5	26.5	16.0
P4KE18A	15.30	17.10	18.90	1	5	25.2	17.0
P4KE20	16.20	18.00	22.00	1	5	29.1	14.0
P4KE20A	17.10	19.00	21.00	1	5	27.7	15.0
P4KE22	17.80	19.80	24.20	1	5	31.9	13.0
P4KE22A	18.80	20.90	23.10	1	5	30.6	14.0
P4KE24	19.40	21.60	26.40	1	5	34.7	12.0
P4KE24A	20.50	22.80	25.20	1	5	33.2	13.0
P4KE27	21.80	24.30	29.70	1	5	39.1	11.0
P4KE27A	23.10	25.70	28.40	1	5	37.5	11.2

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

+ = For Bidirectional Types Having VWM \leq 10V, their ID limit is doubled.

= See General Information for Impulse Current Waveform.

P4KE Series – 400 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)
P4KE30	24.30	27.00	33.00	1	5	43.5	10.0
P4KE30A	25.60	28.50	31.50	1	5	41.4	10.0
P4KE33	26.80	29.70	36.30	1	5	47.7	9.0
P4KE33A	28.20	31.40	34.70	1	5	45.7	9.0
P4KE36	29.10	32.40	39.60	1	5	52.0	8.0
P4KE36A	30.80	34.20	37.80	1	5	49.9	8.4
P4KE39	31.60	35.10	42.90	1	5	56.4	7.4
P4KE39A	33.30	37.10	41.00	1	5	53.9	7.8
P4KE43	34.80	38.70	47.30	1	5	61.9	6.8
P4KE43A	36.80	40.90	45.20	1	5	59.3	7.1
P4KE47	38.10	42.30	51.70	1	5	67.8	6.2
P4KE47A	40.20	44.70	49.40	1	5	64.8	5.0
P4KE51	41.30	45.90	56.10	1	5	73.5	5.7
P4KE51A	43.60	48.50	53.60	1	5	70.1	6.0
P4KE56	45.60	50.40	61.60	1	5	80.5	5.2
P4KE56A	47.80	53.20	58.80	1	5	77.0	5.5
P4KE62	50.20	55.80	68.20	1	5	89.0	4.7
P4KE62A	53.00	58.90	65.10	1	5	85.0	5.0
P4KE68	55.10	61.20	74.80	1	5	98.0	4.3
P4KE68A	58.10	64.60	71.40	1	5	92.0	4.6
P4KE75	60.70	67.50	82.50	1	5	108.0	3.9
P4KE75A	64.10	71.30	78.80	1	5	103.0	4.1
P4KE82	66.40	73.80	90.20	1	5	118.0	3.6
P4KE82A	70.10	77.90	86.10	1	5	113.0	3.7
P4KE91	73.70	81.90	100.00	1	5	131.0	3.2
P4KE91A	77.80	86.50	95.50	1	5	125.0	3.4
P4KE100	81.00	90.00	110.00	1	5	144.0	2.9
P4KE100A	85.50	95.00	105.00	1	5	137.0	3.1
P4KE110	89.20	99.90	121.00	1	5	158.0	2.7
P4KE110A	94.00	105.00	116.00	1	5	152.0	2.8

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P4KE Series – 400 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)
P4KE120	97.20	108.00	132.00	1	5	173.0	2.4
P4KE120A	102.00	114.00	126.00	1	5	165.0	2.5
P4KE130	105.00	117.00	143.00	1	5	187.0	2.2
P4KE130A	111.00	124.00	137.00	1	5	179.0	2.3
P4KE150	121.00	135.00	165.00	1	5	215.0	2.0
P4KE150A	128.00	143.00	158.00	1	5	207.0	2.0
P4KE160	130.00	144.00	176.00	1	5	230.0	1.8
P4KE160A	136.00	152.00	168.00	1	5	219.0	1.9
P4KE170	138.00	153.00	187.00	1	5	244.0	1.7
P4KE170A	145.00	162.00	179.00	1	5	234.0	1.8
P4KE180	146.00	162.00	198.00	1	5	258.0	1.6
P4KE180A	154.00	171.00	189.00	1	5	246.0	1.7
P4KE200	162.00	180.00	220.00	1	5	287.0	1.5
P4KE200A	171.00	190.00	210.00	1	5	274.0	1.53
P4KE220	175.00	198.00	242.00	1	5	344.0	1.16
P4KE220A	185.00	209.00	231.00	1	5	328.0	1.22
P4KE250	202.00	225.00	275.00	1	5	360.0	1.10
P4KE250A	214.00	237.00	263.00	1	5	344.0	1.16
P4KE300	243.00	270.00	330.00	1	5	430.0	0.93
P4KE300A	256.00	285.00	315.00	1	5	414.0	0.97
P4KE350	284.00	315.00	385.00	1	5	504.0	0.79
P4KE350A	300.00	332.00	368.00	1	5	482.0	0.83
P4KE400	324.00	360.00	440.00	1	5	574.0	0.70
P4KE400A	342.00	380.00	420.00	1	5	548.0	0.73
P4KE440	356.00	396.00	484.00	1	5	631.0	0.66
P4KE440A	376.00	418.00	462.00	1	5	600.0	0.69

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