

P4KE6.8(C)A~P4KE550(C)A

TRANSIENT VOLTAGE SUPPRESSOR POWER 400 Watt

BREAK DOWN VOLTAGE

6.8 to 550 Volt

DO-41

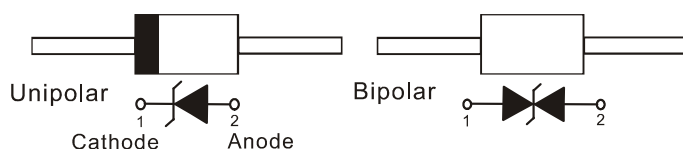
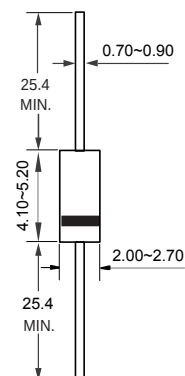
Unit:mm

FEATURES

- Glass passivated junction
- Low inductance
- Plastic Material has UL Flammability Classification 94V-O
- Fast response time: typically less than 1.0ps from 0V to BV min
- High temperature soldering : 260°C /10 seconds at terminals
- ESD IEC-61000-4-2 Air ±30kV, Contact ±30kV
- Lead free in compliance with EU RoHS 2.0

MECHANICAL DATA

- Case: Molded plastic over passivated junction.
- Polarity: Color band denotes cathode end



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Rating	Symbol	Value	Units
Peak Pulse Power Dissipation on $T_A = 25^\circ\text{C}$ (Notes 1)	P_{PP}	400	Watts
Steady State Power Dissipation on Infinite Heat Sink at $T_L=75^\circ\text{C}$	$P_{M(AV)}$	1.5	W
Peak Forward Surge Current per Fig.5 (Notes 2)	I_{FSM}	60	Amps
Peak Pulse Current on $t_p=10/1000\mu\text{s}$ waveform (Notes 1)	I_{PPM}	see Table 1	Amps
Typical Thermal Resistance Junction to Air	R_{JA}	60	$^\circ\text{C} / \text{W}$
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. 8.3ms single half sine-wave, or equivalent square wave, duty cycle = 4 pulses per minutes maximum.

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ELECTRICAL CHARACTERISTICS @25°C

Part Number (Uni)	Part Number (Bi)	Marking		Reverse Stand off Voltage V_R (Volts)	Breakdown Voltage V_{BR} (Volts) @ I_T		Test Current I_T (mA)	Maximum Clamping Voltage V_C @ I_{PP} (V)	Maximum Peak Pulse Current I_{PP} (A)	Maximum Reverse Leakage I_R @ V_R (μA)
		UNI	BI		MIN	MAX				
P4KE6.8A	P4KE6.8CA	P4KE6.8A	P4KE6.8CA	5.80	6.45	7.14	10	10.5	39.00	1000
P4KE7.5A	P4KE7.5CA	P4KE7.5A	P4KE7.5CA	6.40	7.13	7.88	10	11.3	36.30	500
P4KE8.2A	P4KE8.2CA	P4KE8.2A	P4KE8.2CA	7.02	7.79	8.61	10	12.1	33.90	200
P4KE9.1A	P4KE9.1CA	P4KE9.1A	P4KE9.1CA	7.78	8.65	9.55	1	13.4	30.60	50
P4KE10A	P4KE10CA	P4KE10A	P4KE10CA	8.55	9.50	10.50	1	14.5	28.30	10
P4KE11A	P4KE11CA	P4KE11A	P4KE11CA	9.40	10.50	11.60	1	15.6	26.30	5
P4KE12A	P4KE12CA	P4KE12A	P4KE12CA	10.20	11.40	12.60	1	16.7	24.60	5
P4KE13A	P4KE13CA	P4KE13A	P4KE13CA	11.10	12.40	13.70	1	18.2	22.50	1
P4KE15A	P4KE15CA	P4KE15A	P4KE15CA	12.80	14.30	15.80	1	21.2	19.30	1
P4KE16A	P4KE16CA	P4KE16A	P4KE16CA	13.60	15.20	16.80	1	22.5	18.20	1
P4KE18A	P4KE18CA	P4KE18A	P4KE18CA	15.30	17.10	18.90	1	25.5	16.10	1
P4KE20A	P4KE20CA	P4KE20A	P4KE20CA	17.10	19.00	21.00	1	27.7	14.80	1
P4KE22A	P4KE22CA	P4KE22A	P4KE22CA	18.80	20.90	23.10	1	30.6	13.40	1
P4KE24A	P4KE24CA	P4KE24A	P4KE24CA	20.50	22.80	25.20	1	33.2	12.30	1
P4KE27A	P4KE27CA	P4KE27A	P4KE27CA	23.10	25.70	28.40	1	37.5	10.90	1
P4KE30A	P4KE30CA	P4KE30A	P4KE30CA	25.60	28.50	31.50	1	41.4	9.90	1
P4KE33A	P4KE33CA	P4KE33A	P4KE33CA	28.20	31.40	34.70	1	45.7	9.00	1
P4KE36A	P4KE36CA	P4KE36A	P4KE36CA	30.80	34.20	37.80	1	49.9	8.20	1
P4KE39A	P4KE39CA	P4KE39A	P4KE39CA	33.30	37.10	41.00	1	53.9	7.60	1
P4KE43A	P4KE43CA	P4KE43A	P4KE43CA	36.80	40.90	45.20	1	59.3	6.90	1
P4KE47A	P4KE47CA	P4KE47A	P4KE47CA	40.20	44.70	49.40	1	64.8	6.30	1
P4KE51A	P4KE51CA	P4KE51A	P4KE51CA	43.60	48.50	53.60	1	70.1	5.80	1
P4KE56A	P4KE56CA	P4KE56A	P4KE56CA	47.80	53.20	58.80	1	77.0	5.30	1
P4KE62A	P4KE62CA	P4KE62A	P4KE62CA	53.00	58.90	65.10	1	85.0	4.80	1
P4KE68A	P4KE68CA	P4KE68A	P4KE68CA	58.10	64.60	71.40	1	92.0	4.50	1
P4KE75A	P4KE75CA	P4KE75A	P4KE75CA	64.10	71.30	78.80	1	103.0	4.00	1
P4KE82A	P4KE82CA	P4KE82A	P4KE82CA	70.10	77.90	86.10	1	113.0	3.60	1
P4KE91A	P4KE91CA	P4KE91A	P4KE91CA	77.80	86.50	95.50	1	125.0	3.30	1
P4KE100A	P4KE100CA	P4KE100A	P4KE100CA	85.50	95.00	105.00	1	137.0	3.00	1
P4KE110A	P4KE110CA	P4KE110A	P4KE110CA	94.00	105.00	116.00	1	152.0	2.70	1
P4KE120A	P4KE120CA	P4KE120A	P4KE120CA	102.00	114.00	126.00	1	165.0	2.50	1
P4KE130A	P4KE130CA	P4KE130A	P4KE130CA	111.00	124.00	137.00	1	179.0	2.30	1
P4KE150A	P4KE150CA	P4KE150A	P4KE150CA	128.00	143.00	158.00	1	207.0	2.00	1
P4KE160A	P4KE160CA	P4KE160A	P4KE160CA	136.00	152.00	168.00	1	219.0	1.90	1
P4KE170A	P4KE170CA	P4KE170A	P4KE170CA	145.00	162.00	179.00	1	234.0	1.80	1
P4KE180A	P4KE180CA	P4KE180A	P4KE180CA	154.00	171.00	189.00	1	246.0	1.70	1
P4KE200A	P4KE200CA	P4KE200A	P4KE200CA	171.00	190.00	210.00	1	274.0	1.50	1
P4KE220A	P4KE220CA	P4KE220A	P4KE220CA	185.00	209.00	231.00	1	328.0	1.30	1
P4KE250A	P4KE250CA	P4KE250A	P4KE250CA	214.00	237.00	263.00	1	344.0	1.20	1
P4KE300A	P4KE300CA	P4KE300A	P4KE300CA	256.00	285.00	315.00	1	414.0	1.00	1
P4KE350A	P4KE350CA	P4KE350A	P4KE350CA	300.00	332.00	368.00	1	482.0	0.85	1
P4KE400A	P4KE400CA	P4KE400A	P4KE400CA	342.00	380.00	420.00	1	548.0	0.75	1
P4KE440A	P4KE440CA	P4KE440A	P4KE440CA	376.00	418.00	462.00	1	602.0	0.68	1
P4KE480A	P4KE480CA	P4KE480A	P4KE480CA	408.00	456.00	504.00	1	658.0	0.61	1
P4KE510A	P4KE510CA	P4KE510A	P4KE510CA	434.00	485.00	535.00	1	698.0	0.57	1
P4KE530A	P4KE530CA	P4KE530A	P4KE530CA	451.00	503.50	556.50	1	725.0	0.55	1
P4KE540A	P4KE540CA	P4KE540A	P4KE540CA	460.00	513.00	567.00	1	740.0	0.54	1
P4KE550A	P4KE550CA	P4KE550A	P4KE550CA	468.00	522.50	577.50	1	760.0	0.52	1

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RATING AND CHARACTERISTIC CURVES

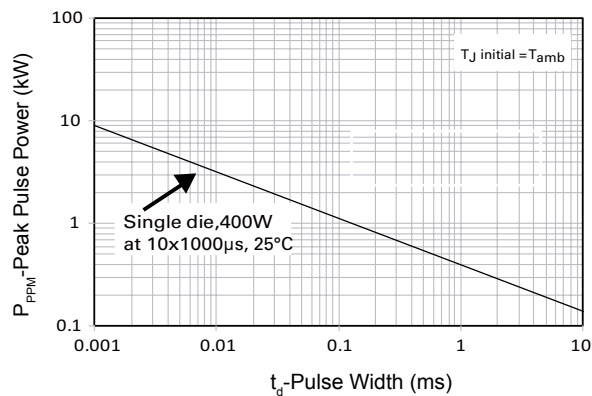


Fig.1 Pulse Power Rating Curve

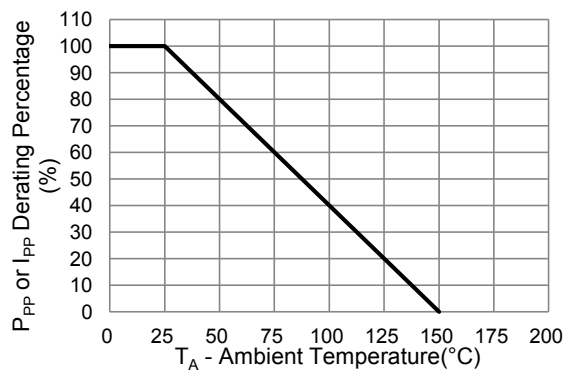


Fig.2 Derating Curve

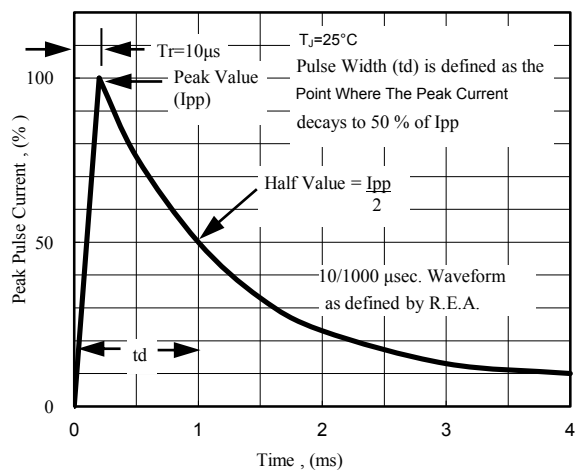


Fig.3 - Pulse Waveform

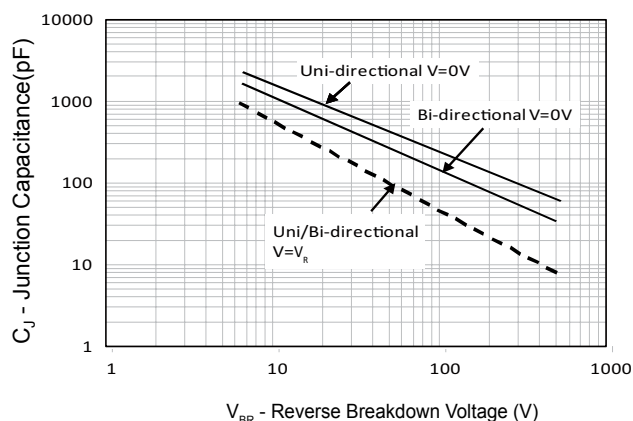


Fig.4 Typical Capacitance

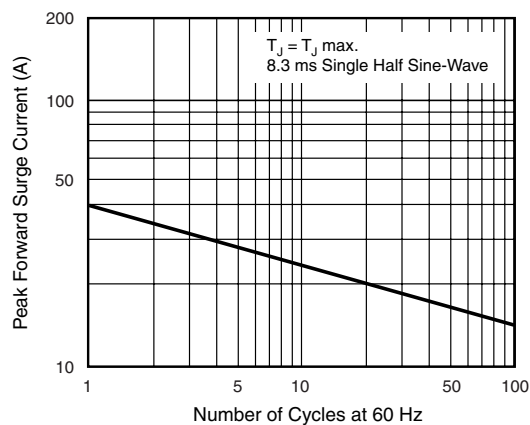


Fig 5. Maximum Non-Repetitive Forward Surge Current Uni-Directional Only

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Ordering Information

- Packing information

P4KE6.8(C)A~P4KE550(C)A	Packing Quantity
Tape&Reel	N/A
Ammo Packing	3kpcs/Ammo Box