

P5KE5.0A~P5KE200CA

SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR POWER 500 Watt

BREAK DOWN VOLTAGE 5.0 to 200 Volt

DO-15

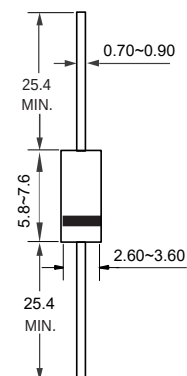
Unit:mm

FEATURES

- Glass passivated chip
- Low leakage
- Uni and Bidirectional unit Excellent clamping capability
- Plastic Material has UL Flammability Classification 94V-O
- Lead free in compliance with EU RoHS
- Unidirectional-type number and cathode band Bidirectional-type number only

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 $T_A = 25^{\circ}\text{C}$	P_{PP}	500	Watts
Steady State Power Dissipation on Infinite Heat Sink at $T_L=75^{\circ}\text{C}$	$P_{M(AV)}$	1.0	W
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +175	$^{\circ}\text{C}$

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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				
P5KE5.0A	P5KE5.0CA	P5KE5.0A	P5KE5.0CA	5.0	6.40	7.25	10	9.2	54.3	600
P5KE6.0A	P5KE6.0CA	P5KE6.0A	P5KE6.0CA	6.0	6.67	7.67	10	10.3	48.5	600
P5KE6.5A	P5KE6.5CA	P5KE6.5A	P5KE6.5CA	6.5	7.22	8.30	10	11.2	44.7	400
P5KE7.0A	P5KE7.0CA	P5KE7.0A	P5KE7.0CA	7.0	7.78	8.95	10	12.0	41.7	150
P5KE7.5A	P5KE7.5CA	P5KE7.5A	P5KE7.5CA	7.5	8.33	9.58	1	12.9	38.8	50
P5KE8.0A	P5KE8.0CA	P5KE8.0A	P5KE8.0CA	8.0	8.89	10.23	1	13.6	36.7	25
P5KE8.5A	P5KE8.5CA	P5KE8.5A	P5KE8.5CA	8.5	9.44	10.82	1	14.4	34.7	10
P5KE9.0A	P5KE9.0CA	P5KE9.0A	P5KE9.0CA	9.0	10.00	11.50	1	15.4	32.5	5
P5KE10A	P5KE10CA	P5KE10A	P5KE10CA	10.0	11.10	12.80	1	17.0	29.4	3
P5KE11A	P5KE11CA	P5KE11A	P5KE11CA	11.0	12.20	14.00	1	18.2	27.4	3
P5KE12A	P5KE12CA	P5KE12A	P5KE12CA	12.0	13.30	15.30	1	19.9	25.1	3
P5KE13A	P5KE13CA	P5KE13A	P5KE13CA	13.0	14.40	16.50	1	21.5	23.2	3
P5KE14A	P5KE14CA	P5KE14A	P5KE14CA	14.0	15.60	17.90	1	23.2	21.5	3
P5KE15A	P5KE15CA	P5KE15A	P5KE15CA	15.0	16.70	19.20	1	24.4	20.6	3
P5KE16A	P5KE16CA	P5KE16A	P5KE16CA	16.0	17.80	20.50	1	26.0	19.2	3
P5KE17A	P5KE17CA	P5KE17A	P5KE17CA	17.0	18.90	21.70	1	27.6	16.1	3
P5KE18A	P5KE18CA	P5KE18A	P5KE18CA	18.0	20.00	23.30	1	29.2	17.2	3
P5KE20A	P5KE20CA	P5KE20A	P5KE20CA	20.0	22.20	25.50	1	32.4	15.4	3
P5KE22A	P5KE22CA	P5KE22A	P5KE22CA	22.0	24.40	28.00	1	35.5	14.1	3
P5KE24A	P5KE24CA	P5KE24A	P5KE24CA	24.0	26.70	30.70	1	38.9	12.8	3
P5KE26A	P5KE26CA	P5KE26A	P5KE26CA	26.0	28.90	33.20	1	42.1	11.9	3
P5KE28A	P5KE28CA	P5KE28A	P5KE28CA	28.0	31.10	35.80	1	45.4	11.0	3
P5KE30A	P5KE30CA	P5KE30A	P5KE30CA	30.0	33.30	38.30	1	48.4	10.3	3
P5KE33A	P5KE33CA	P5KE33A	P5KE33CA	33.0	36.70	42.20	1	53.3	9.4	3
P5KE36A	P5KE36CA	P5KE36A	P5KE36CA	36.0	40.00	46.00	1	58.1	8.6	3
P5KE40A	P5KE40CA	P5KE40A	P5KE40CA	40.0	44.40	51.10	1	64.5	7.8	3
P5KE43A	P5KE43CA	P5KE43A	P5KE43CA	43.0	47.80	54.90	1	69.4	7.2	3
P5KE45A	P5KE45CA	P5KE45A	P5KE45CA	45.0	50.00	57.50	1	72.7	6.9	3
P5KE48A	P5KE48CA	P5KE48A	P5KE48CA	48.0	53.30	61.30	1	77.4	6.5	3
P5KE51A	P5KE51CA	P5KE51A	P5KE51CA	51.0	56.70	65.20	1	82.4	6.1	3
P5KE54A	P5KE54CA	P5KE54A	P5KE54CA	54.0	60.00	69.00	1	87.1	5.7	3
P5KE58A	P5KE58CA	P5KE58A	P5KE58CA	58.0	64.40	74.10	1	93.6	5.3	3
P5KE60A	P5KE60CA	P5KE60A	P5KE60CA	60.0	66.70	76.70	1	96.8	5.2	3
P5KE64A	P5KE64CA	P5KE64A	P5KE64CA	64.0	71.10	81.80	1	103.0	4.9	3
P5KE70A	P5KE70CA	P5KE70A	P5KE70CA	70.0	77.80	89.50	1	113.0	4.4	3
P5KE75A	P5KE75CA	P5KE75A	P5KE75CA	75.0	83.30	95.80	1	121.0	4.1	3
P5KE78A	P5KE78CA	P5KE78A	P5KE78CA	78.0	86.70	99.70	1	126.0	4.0	3
P5KE85A	P5KE85CA	P5KE85A	P5KE85CA	85.0	94.40	108.20	1	137.0	3.6	3
P5KE90A	P5KE90CA	P5KE90A	P5KE90CA	90.0	100.00	115.50	1	146.0	3.4	3
P5KE100A	P5KE100CA	P5KE100A	P5KE100CA	100.0	111.00	128.00	1	162.0	3.1	3
P5KE110A	P5KE110CA	P5KE110A	P5KE110CA	110.0	122.00	140.50	1	177.0	2.8	3
P5KE120A	P5KE120CA	P5KE120A	P5KE120CA	120.0	133.00	153.00	1	193.0	2.0	3
P5KE130A	P5KE130CA	P5KE130A	P5KE130CA	130.0	144.00	165.50	1	209.0	2.4	3
P5KE150A	P5KE150CA	P5KE150A	P5KE150CA	150.0	167.00	192.50	1	243.0	2.1	3
P5KE160A	P5KE160CA	P5KE160A	P5KE160CA	160.0	178.00	205.00	1	259.0	19	3
P5KE170A	P5KE170CA	P5KE170A	P5KE170CA	170.0	189.00	217.50	1	275.0	1.8	3
P5KE180A	P5KE180CA	P5KE180A	P5KE180CA	180.0	198.00	230.40	1	289.0	1.7	3
P5KE190A	P5KE190CA	P5KE190A	P5KE190CA	190.0	209.00	243.20	1	310.0	1.6	3
P5KE200A	P5KE200CA	P5KE200A	P5KE200CA	200.0	220.00	256.00	1	329.2	1.5	3

For bidirectional type having V_R of 10 volts and less, the I_R limit is double.

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RATING AND CHARACTERISTIC CURVES

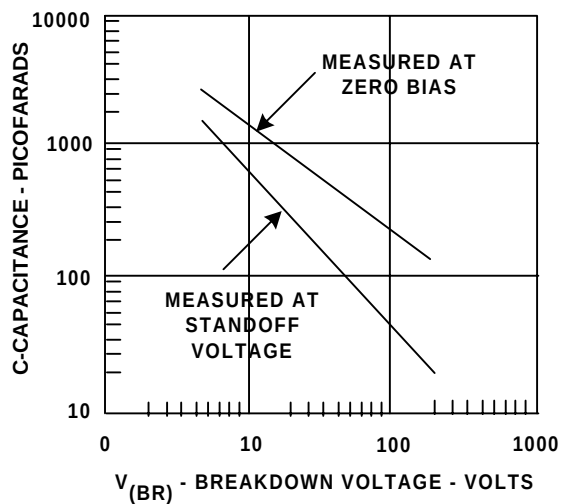


FIGURE 1
TYPICAL CAPACITANCE VS
BREAKDOWN VOLTAGE

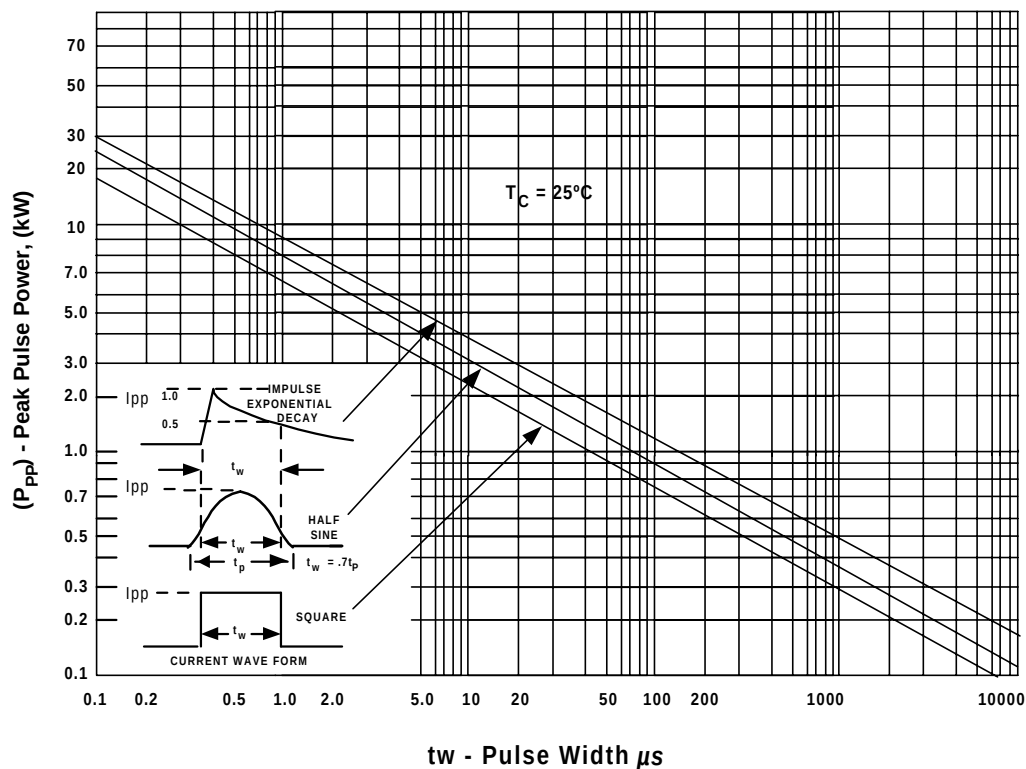


FIGURE 2
PEAK PULSE POWER VS. PULSE TIME

P5KE5.0A~P5KE200CA

ORDER INFORMATION

- Packing information

Part Number	Case	Reel Size	QUANTITY
P5KE5.0A~P5KE200CA	DO-15	13 Inch	4000