

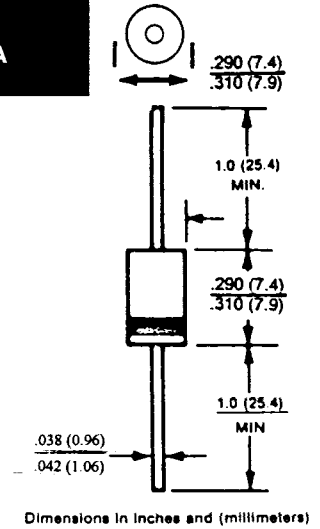
Semitronics Corp.

ELECTRICAL CHARACTERISTICS (at 25°C)

PART NUMBER	REVERSE STAND OFF VOLTAGE (NOTE 1) VR VOLTS	BREAKDOWN VOLTAGE BV		IT mA	MAXIMUM REVERSE LEAKAGE IR uA	MAXIMUM CLAMPING VOLTAGE Vc (FIG. 3) VOLTS	MAXIMUM PEAK PULSE CURRENT Ipp A (FIG. 3)	MAXIMUM VOLTAGE TEMPERATURE VARIATION OF BV mV/C
		MIN. VOLTS	MAX. VOLTS					
5KP5.0	5.0	6.40	7.30	50	2000	9.6	520	4.0
5KP5.0A	5.0	6.40	7.00	50	2000	9.2	543	4.0
5KP6.0	6.0	6.67	8.15	50	5000	11.4	439	4.0
5KP6.0A	6.0	6.67	7.37	50	5000	10.3	485	4.0
5KP6.5	6.5	7.22	8.82	50	2000	12.3	407	4.0
5KP6.5A	6.5	7.22	7.89	50	2000	11.2	447	4.0
5KP7.0	7.0	7.78	9.51	50	1000	13.3	378	5.0
5KP7.0A	7.0	7.78	8.60	50	1000	12.0	417	5.0
5KP7.5	7.5	8.33	10.2	5	250	14.3	350	6.0
5KP7.5A	7.5	8.33	9.21	5	250	12.9	388	6.0
5KP8.0	8.0	8.89	10.9	5	150	15.0	333	6.0
5KP8.0A	8.0	8.89	9.83	5	150	13.6	367	6.0
5K8.5	8.5	9.44	11.5	5	50	15.9	314	7.0
5KP8.5A	8.5	9.44	10.4	5	50	14.4	347	7.0
5KP9.0	9.0	10.0	12.2	5	20	16.9	295	8.0
5KP9.0A	9.0	10.0	11.1	5	20	15.4	325	8.0
5KP10	10	11.1	13.6	5	15	18.8	266	9.0
5KP10A	10	11.1	12.3	5	15	17.0	294	9.0
5KP11	11	12.2	14.9	5	10	20.1	249	10
5KP11A	11	12.2	13.5	5	10	18.2	274	10
5KP12	12	13.3	16.3	5	10	22.0	227	11
5KP12A	12	13.3	14.7	5	10	19.9	251	11
5KP13	13	14.4	17.6	5	10	23.8	210	12
5KP13A	13	14.4	15.9	5	10	21.5	232	12
5KP14	14	15.6	19.1	5	10	25.8	194	13
5KP14A	14	15.6	17.2	5	10	23.2	215	13
5KP15	15	16.7	20.4	5	10	26.9	188	15
5KP15A	15	16.7	18.5	5	10	24.4	206	15
5KP16	16	17.8	21.8	5	10	28.8	176	18
5KP16A	16	17.8	19.7	5	10	26.0	192	16
5KP17	17	18.9	23.1	5	10	30.5	164	19
5KP17A	17	18.9	20.9	5	10	27.6	181	18
5KP18	18	20.0	24.4	5	10	32.2	155	20
5KP18A	18	20.0	22.1	5	10	29.2	172	19
5KP20	20	22.2	27.1	5	10	35.8	139	24
5KP20A	20	22.2	24.5	5	10	32.4	154	22
5KP22	22	24.4	29.8	5	10	39.4	127	27
5KP22A	22	24.4	26.9	5	10	35.5	141	24
5KP24	24	26.7	32.5	5	10	43.0	116	30
5KP24A	24	26.7	29.5	5	10	38.9	128	27
5KP26	26	28.9	35.3	5	10	46.6	107	33
5KP26A	26	28.9	31.9	5	10	42.1	119	29
5KP28	28	31.1	38.0	5	10	50.1	99	34
5KP28A	28	31.1	34.4	5	10	45.5	110	30
5KP30	30	33.3	40.7	5	10	53.3	93	38
5KP30A	30	33.3	36.8	5	10	48.4	103	35
5KP33	33	36.7	44.9	5	10	59.0	85	41
5KP33A	33	36.7	40.6	5	10	53.3	94	38
5KP36	36	40.0	48.9	5	10	64.3	78	45
5KP36A	36	40.0	44.2	5	10	58.1	86	40
5KP40	40	44.4	54.3	5	10	71.4	70	50
5KP40A	40	44.4	49.1	5	10	64.5	78	45
5KP43	43	47.8	58.4	5	10	76.7	65	54
5KP43A	43	47.8	52.8	5	10	69.4	72	49
5KP45	45	50.0	61.1	5	10	80.3	62	57
5KP45A	45	50.0	55.3	5	10	72.7	69	51
5KP48	48	53.3	65.1	5	10	85.5	58	62
5KP48A	48	53.3	58.9	5	10	77.4	65	55
5KP51	51	56.7	69.3	5	10	91.1	55	65
5KP51A	51	56.7	62.7	5	10	82.4	61	60
5KP54	54	60.0	73.3	5	10	96.3	52	70
5KP54A	54	60.0	66.3	5	10	87.1	57	64
5KP58	58	64.4	78.7	5	10	103.0	49	77
5KP58A	58	64.4	71.2	5	10	93.6	53	69
5KP60	60	66.7	81.5	5	10	107.0	47	79
5KP60A	60	66.7	73.7	5	10	96.8	52	70
5KP64	64	71.1	86.9	5	10	114.0	44	85
5KP64A	64	71.1	78.6	5	10	103.0	49	75
5KP70	70	77.8	95.1	5	10	125	40	93
5KP70A	70	77.8	86.0	5	10	113	44	84
5KP75	75	83.3	102.0	5	10	134	37	100
5KP75A	75	83.3	92.1	5	10	121	41	90
5KP78	78	86.7	106.0	5	10	139	36	104
5KP78A	78	86.7	95.8	5	10	126	40	94
5KP85	85	94.4	115.0	5	10	151	33	113
5KP85A	85	94.4	104.0	5	10	137	36	102
5KP90	90	100	122	5	10	160	31	120
5KP90A	90	100	111	5	10	146	34	109
5KP100	100	111	136	5	10	179	28	134
5KP100A	100	111	123	5	10	162	31	122
5KP110	110	122	149	5	10	196	26	147
5KP110A	110	122	135	5	10	177	28	132

V_i at 100 amps peak, 8.3 msec sine wave, 3.5 volts maximum

TRANSIENT VOLTAGE SUPPRESSORS 5KP5.0 THRU 5KP110A



For Bipolar Add CA Suffix. If VR is 10V or less, IR limit is doubled for CA bipolar devices.

MAXIMUM RATINGS

- 5000 Watts of Peak Power dissipation at 25°C (see derating curve)
- $t_{clamping}$ (0 volts to BV min): Less than 1×10^{-12} second (theoretical)
- Operating and Storage temperatures: -55° to +175°C
- Steady State power dissipation: 5.0 watt at $T_L = 25^\circ\text{C}$, Lead Length = 3/8"
- Repetition rate (duty cycle): .05%

ABBREVIATIONS & SYMBOLS

V _R	Stand-off Voltage: Applied Reverse Voltage to assure a nonconductive condition. (See Note 1)
BV _(min)	This is the minimum Breakdown Voltage the device will exhibit and is used to assure that conduction does not occur prior to this voltage level at 25 °C.
V _{C,max}	Maximum Clamping Voltage. The maximum peak voltage appearing across the TransZorb when subjected to the peak pulse current in a one millisecond time interval. The peak pulse voltages are the combination of voltage rise due to both the series resistance and thermal rise.
I ₁₀₀	Peak Pulse Current
P ₅₀	Peak Pulse Power
I _R	Reverse Leakage