Data Sheet

Customer:

Product: Transient Voltage Suppressors 3000W – 3KP Series

Package : P6

Issued Date: 10-Feb.-2015

Edition: Ver. 1

Record of change

Date	Ver.	Description	Page
10-Feb.-2015	1		

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10-Feb.-2015	10-Feb.-2015	10-Feb.-2015	
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HITANO
ENTERPRISE CORP. ®

3KP5.0(C)A THRU 3KP180(C)A

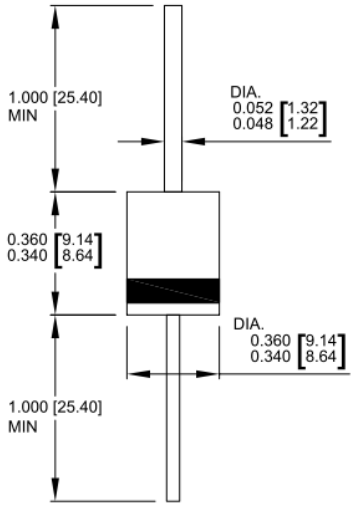
3000W TRANSIENT VOLTAGE SUPPRESSOR

FEATURES

- PLASTIC PACKAGE HAS UNDERWRITERS LABORATORY FLAMMABILITY CLASSIFICATION 94V-0.
- EXCEEDS ENVIRONMENTAL STANDARDS MIL-STD-19500.
- 3000W SURGE CAPABILITY AT 1ms.
- EXCELLENT CLAMPING CAPABILITY.
- LOW ZENER IMPEDANCE.
- FAST RESPONSE TIME:TYPICALLY LESS THAN 1.0 PS FROM 0 VOLTS TO BV MIN.
- TYPICAL IR LESS THAN 1μA ABOVE 10V.
- HIGH TEMPERATURE SOLDERING GUARANTEED:260℃/10S /.375″ (9.5mm) LEAD LENGTH/5LBS., (2.3KG) TENSION.
- ROHS&REACH COMPLIANT.

MECHANICAL DATA

- CASE：MOLDED PLASTIC OVER GLASS PASSIVATED JUNCTION.
- TERMINALS：AXIAL LEADS, SOLDERABLE PER MIL-STD-202, METHOD 208.
- POLARITY：COLOR BAND DENOTED CATHODE EXCEPT BIPOLAR
- WEIGHT：2.1 GRAMS.



CASE：P6

DIMENSIONS IN INCHES AND (MILLIMETERS)

RATINGS	SYMBOL	VALUE	UNITS
PEAK POWER DISSIPATION WITH A 10/1000us WAVEFORM (NOTE1)	P_{PK}	MINIMUM 3000	WATTS
PEAK PULSE CURRENT WITH A 10/1000us WAVEFORM(NOTE 1)	I_{PPM}	SEE NEXT TABLE	A
STEADY STATE POWER DISSIPATION AT T_L=75℃ ON INFINITE HEATSINK	$P_{M(AV)}$	6.5	WATTS
OPERATING AND STORAGE TEMPERATURE RANGE	T_J,T_{STG}	- 55 TO + 150	℃

Part Number (Uni)	Part Number (Bi)	Breakdown Voltage V_{BR} @I_T			Maximum Reverse Leakage I_R @V_{RWM}(uA)	Working Peak Reverse Voltage V_{RWM} (V)	Maximum Reverse Surge Current I_{PP} (A)	Maximum Clamping Voltage V_C @I_{PP}(V)
		Min (V)	Max (V)	I_T (mA)				
3KP5.0	3KP5.0C	6.40	7.30	50	5000	5	312.50	9.6
3KP5.0A	3KP5.0CA	6.40	7.00	50	5000	5	326.09	9.2
3KP6.0	3KP6.0C	6.67	8.15	50	5000	6	263.16	11.4
3KP6.0A	3KP6.0CA	6.67	7.37	50	5000	6	291.26	10.3
3KP6.5	3KP6.5C	7.22	8.82	50	2000	7	243.90	12.3
3KP6.5A	3KP6.5CA	7.22	7.98	50	2000	7	267.86	11.2
3KP7.0	3KP7.0C	7.78	9.51	50	1000	7	225.56	13.3
3KP7.0A	3KP7.0CA	7.78	8.60	50	1000	7	250.00	12.0
3KP7.5	3KP7.5C	8.33	10.20	5	250	8	209.79	14.3
3KP7.5A	3KP7.5CA	8.33	9.21	5	250	8	232.56	12.9
3KP8.0	3KP8.0C	8.89	10.90	5	150	8	200.00	15.0
3KP8.0A	3KP8.0CA	8.89	9.83	5	150	8	220.59	13.6
3KP8.5	3KP8.5C	9.44	11.50	5	50	9	188.68	15.9
3KP8.5A	3KP8.5CA	9.44	10.40	5	50	9	208.33	14.4
3KP9.0	3KP9.0C	10.0	12.20	5	20	9	177.51	16.9
3KP9.0A	3KP9.0CA	10.0	11.10	5	20	9	194.81	15.4
3KP10	3KP10C	11.1	13.60	5	15	10	159.57	18.8
3KP10A	3KP10CA	11.1	12.30	5	15	10	176.47	17.0
3KP11	3KP11C	12.2	14.90	5	2	11	149.25	20.1
3KP11A	3KP11CA	12.2	13.50	5	2	11	164.84	18.2
3KP12	3KP12C	13.3	16.30	5	2	12	136.36	22.0
3KP12A	3KP12CA	13.3	14.70	5	2	12	150.75	19.9
3KP13	3KP13C	14.4	17.60	5	2	13	126.05	23.8
3KP13A	3KP13CA	14.4	15.90	5	2	13	139.53	21.5
3KP14	3KP14C	15.6	19.10	5	2	14	116.28	25.8
3KP14A	3KP14CA	15.6	17.20	5	2	14	129.31	23.2
3KP15	3KP15C	16.7	20.40	5	2	15	111.52	26.9
3KP15A	3KP15CA	16.7	18.50	5	2	15	122.95	24.4
3KP16	3KP16C	17.8	21.80	5	2	16	104.17	28.8
3KP16A	3KP16CA	17.8	19.70	5	2	16	115.38	26.0
3KP17	3KP17C	18.9	23.10	5	2	17	98.36	30.5
3KP17A	3KP17CA	18.9	20.90	5	2	17	108.70	27.6
3KP18	3KP18C	20.0	24.40	5	2	18	93.17	32.2
3KP18A	3KP18CA	20.0	22.10	5	2	18	102.74	29.2
3KP19	3KP19C	21.1	25.76	5	2	19	88.21	34.0
3KP19A	3KP19CA	21.1	23.30	5	2	19	97.47	30.8
3KP20	3KP20C	22.2	27.10	5	2	20	83.80	35.8
3KP20A	3KP20CA	22.2	24.50	5	2	20	92.59	32.4
3KP22	3KP22C	24.4	29.80	5	2	22	76.14	39.4
3KP22A	3KP22CA	24.4	26.90	5	2	22	84.51	35.5
3KP24	3KP24C	26.7	32.60	5	2	24	69.77	43.0
3KP24A	3KP24CA	26.7	29.50	5	2	24	77.12	38.9
3KP26	3KP26C	28.9	35.30	5	2	26	64.38	46.6
3KP26A	3KP26CA	28.9	31.90	5	2	26	71.26	42.1
3KP28	3KP28C	31.1	38.00	5	2	28	60.00	50.0
3KP28A	3KP28CA	31.1	34.40	5	2	28	66.08	45.4
3KP30	3KP30C	33.3	40.70	5	2	30	56.07	53.5
3KP30A	3KP30CA	33.3	36.80	5	2	30	61.98	48.4
3KP33	3KP33C	36.7	44.90	5	2	33	50.85	59.0
3KP33A	3KP33CA	36.7	40.60	5	2	33	56.29	53.3
3KP36	3KP36C	40.0	48.90	5	2	36	46.66	64.3
3KP36A	3KP36CA	40.0	44.20	5	2	36	51.64	58.1

Part Number (Uni)	Part Number (Bi)	Breakdown Voltage V_{BR} @I_T			Maximum Reverse Leakage I_R @V_{RWM}(uA)	Working Peak Reverse Voltage V_{RWM} (V)	Maximum Reverse Surge Current I_{PP} (A)	Maximum Clamping Voltage V_C @I_{PP}(V)
		Min (V)	Max (V)	I_T (mA)				
3KP40	3KP40C	44.40	54.30	5	2	40	42.02	71.4
3KP40A	3KP40CA	44.40	49.10	5	2	40	46.51	64.5
3KP43	3KP43C	47.80	58.40	5	2	43	39.11	76.7
3KP43A	3KP43CA	47.80	52.80	5	2	43	43.23	69.4
3KP45	3KP45C	50.00	61.10	5	2	45	37.36	80.3
3KP45A	3KP45CA	50.00	55.30	5	2	45	41.27	72.7
3KP48	3KP48C	53.30	65.10	5	2	48	35.09	85.5
3KP48A	3KP48CA	53.30	58.90	5	2	48	38.76	77.4
3KP51	3KP51C	56.70	69.30	5	2	51	32.93	91.1
3KP51A	3KP51CA	56.70	62.70	5	2	51	36.41	82.4
3KP54	3KP54C	60.00	73.30	5	2	54	31.15	96.3
3KP54A	3KP54CA	60.00	66.30	5	2	54	34.44	87.1
3KP58	3KP58C	64.40	78.70	5	2	58	29.13	103.0
3KP58A	3KP58CA	64.40	71.20	5	2	58	32.05	93.6
3KP60	3KP60C	66.70	81.50	5	2	60	28.04	107.0
3KP60A	3KP60CA	66.70	73.70	5	2	60	30.99	96.8
3KP64	3KP64C	71.10	86.90	5	2	64	26.32	114.0
3KP64A	3KP64CA	71.10	78.60	5	2	64	29.13	103.0
3KP70	3KP70C	77.80	95.10	5	2	70	24.00	125.0
3KP70A	3KP70CA	77.80	86.00	5	2	70	26.55	113.0
3KP75	3KP75C	83.30	102.0	5	2	75	22.39	134.0
3KP75A	3KP75CA	83.30	92.10	5	2	75	24.79	121.0
3KP78	3KP78C	86.70	106.0	5	2	78	21.58	139.0
3KP78A	3KP78CA	86.70	95.80	5	2	78	23.81	126.0
3KP80	3KP80C	88.96	108.8	5	2	80	20.95	143.2
3KP80A	3KP80CA	88.80	97.60	5	2	80	23.15	129.6
3KP85	3KP85C	94.40	115.0	5	2	85	19.87	151.0
3KP85A	3KP85CA	94.40	104.0	5	2	85	21.90	137.0
3KP90	3KP90C	100.00	122.0	5	2	90	18.75	160.0
3KP90A	3KP90CA	100.00	111.0	5	2	90	20.55	146.0
3KP100	3KP100C	111.00	136.0	5	2	100	16.76	179.0
3KP100A	3KP100CA	111.00	123.0	5	2	100	18.52	162.0
3KP110	3KP110C	122.00	149.0	5	2	110	15.31	196.0
3KP110A	3KP110CA	122.00	135.0	5	2	110	16.95	177.0
3KP120	3KP120C	133.00	163.0	5	2	120	14.02	214.0
3KP120A	3KP120CA	133.00	147.0	5	2	120	15.54	193.0
3KP130	3KP130C	144.00	176.0	5	2	130	12.99	231.0
3KP130A	3KP130CA	144.00	159.0	5	2	130	14.35	209.0
3KP140	3KP140C	155.68	190.4	5	2	140	11.97	250.6
3KP140A	3KP140CA	155.00	171.0	5	2	140	13.23	226.8
3KP150	3KP150C	167.00	204.0	5	2	150	11.19	268.0
3KP150A	3KP150CA	167.00	185.0	5	2	150	12.35	243.0
3KP160	3KP160C	178.00	218.0	5	2	160	10.45	287.0
3KP160A	3KP160CA	178.00	197.0	5	2	160	11.58	259.0
3KP170	3KP170C	189.00	231.0	5	2	170	9.87	304.0
3KP170A	3KP170CA	189.00	209.0	5	2	170	10.91	275.0
3KP180	3KP180C	200.16	244.8	5	2	180	9.31	322.2
3KP180A	3KP180CA	200.00	220.0	5	2	180	10.29	291.6

Ratings and Characteristics Curves (T_A=25℃ unless otherwise noted)

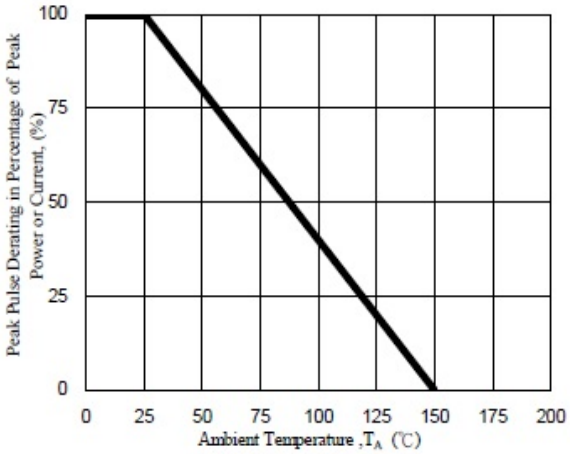


Fig. 1 - Pulse Derating Curve

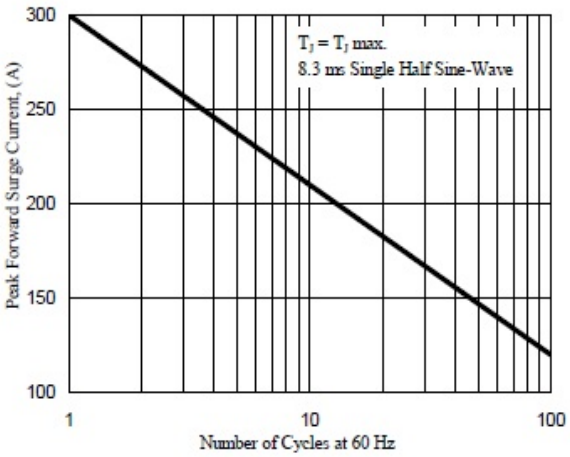


Fig. 2 - Maximum Non-Repetitive Surge Current

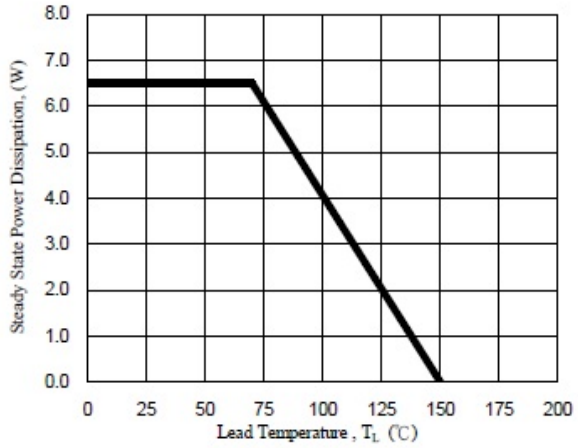


Fig. 3 - Steady State Power Derating Curve

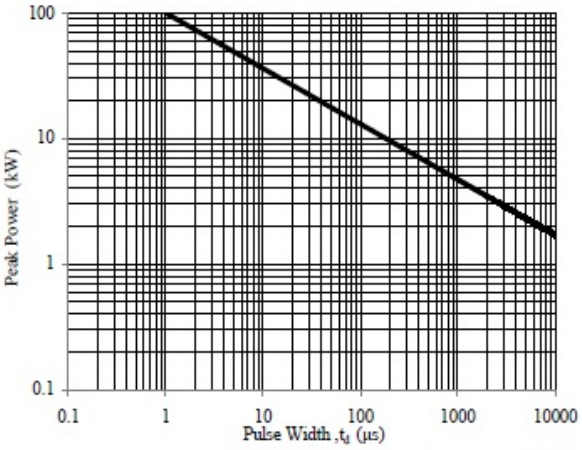


Fig. 4 - Peak Pulse Power Rating Curve

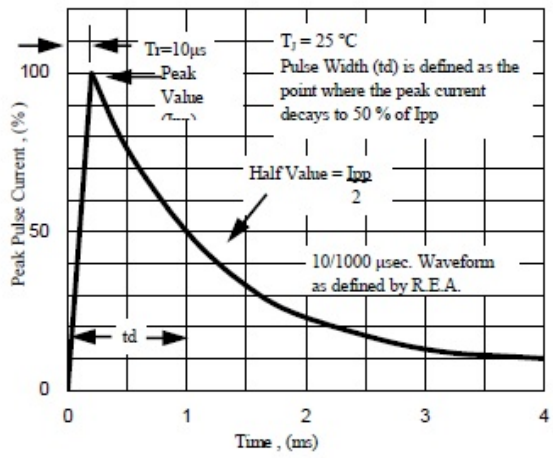


Fig. 5 - Pulse Waveform

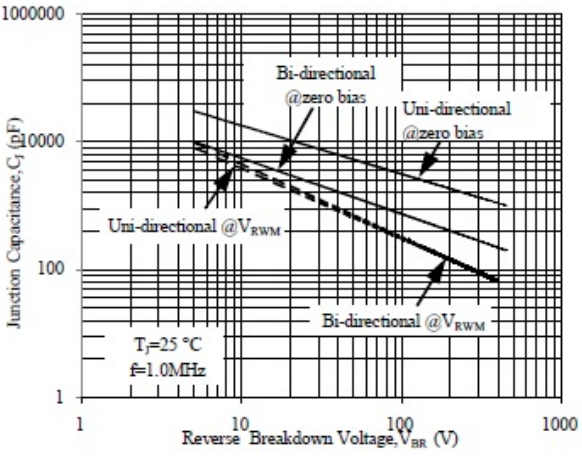


Fig. 6 - Typical Junction Capacitance