

GLASS PASSIVATED UNIDIRECTIONAL AND BIDIRECTIONAL TRANSIENT VOLTAGE SUPPRESSORS

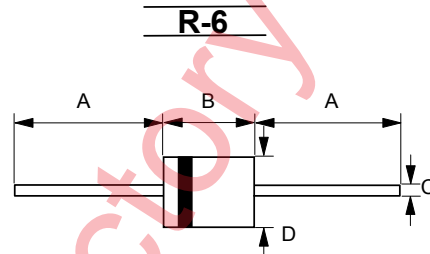
REVERSE VOLTAGE - **5.0 to 220** Volts
 POWER DISSIPATION - **3000** WATTS

FEATURES

- Glass passivated chip
- Low leakage
- Uni and Bidirectional unit
- Excellent clamping capability
- The plastic material has U/L recognition 94V-0
- Fast response time

MECHANICAL DATA

- Case : Molded Plastic
- Marking : Unidirectional - type number and cathode band Bidirectional - type number only
- Weight : 0.07 ounces, 2.1 grams



R-6		
Dim.	Min.	Max.
A	25.4	-
B	8.60	9.10
C	1.22 ϕ	1.32 ϕ
D	8.60 ϕ	9.10 ϕ
All Dimensions in millimeter		

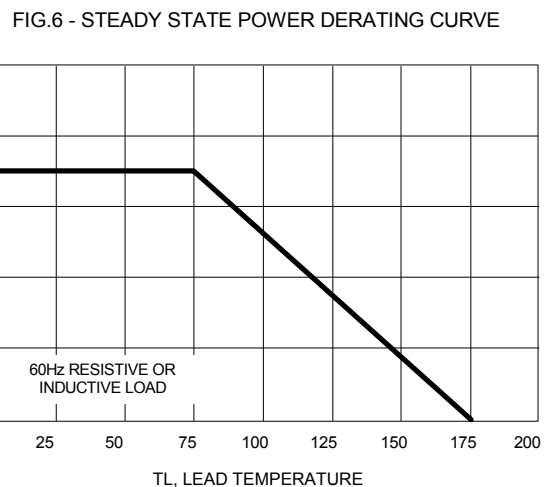
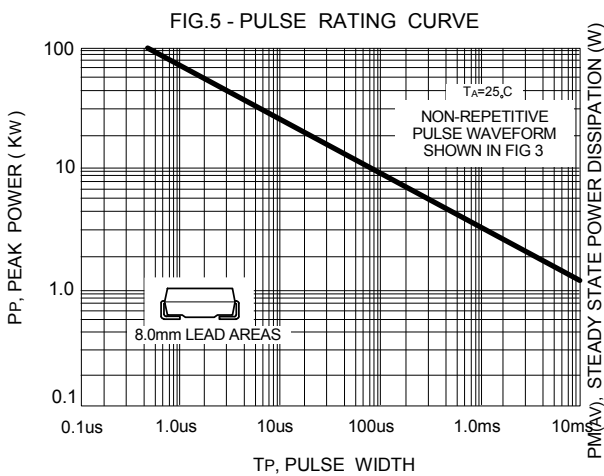
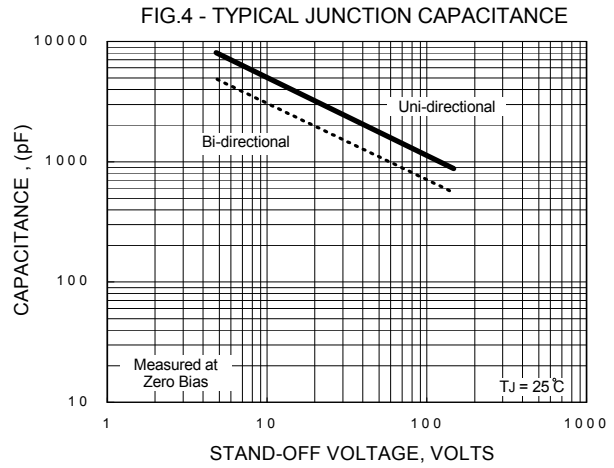
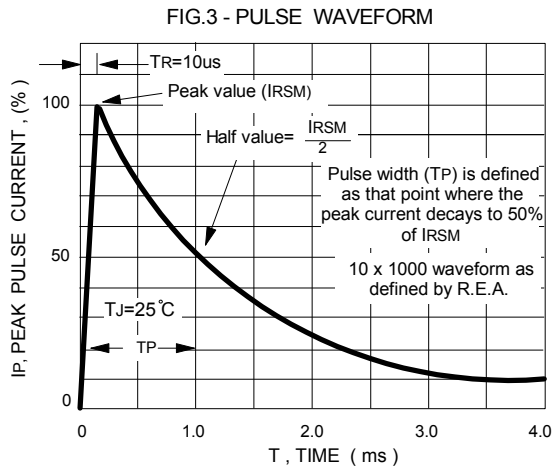
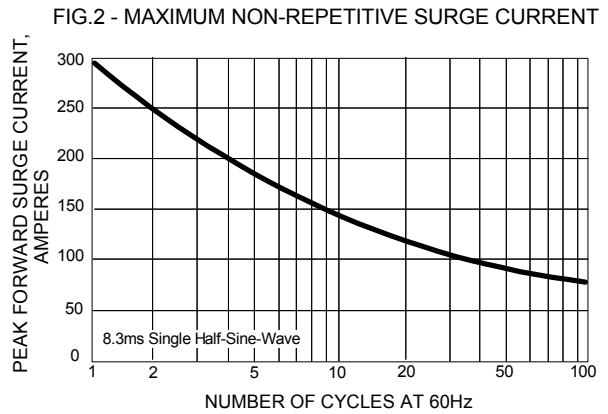
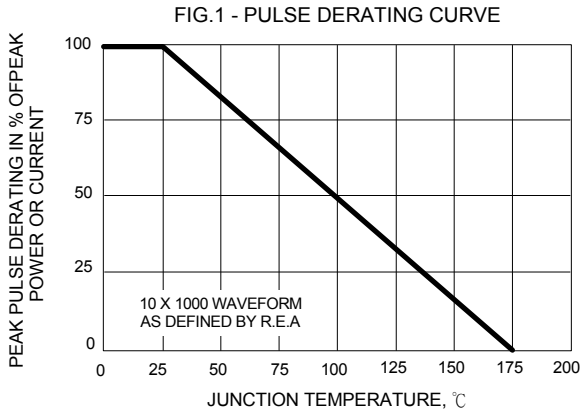
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
 Single phase, half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOLS	VALUE	UNIT
PEAK POWER DISSIPATION AT $T_J = 25^\circ\text{C}$, $T_P = 1\text{ms}$ (Note 1)	PPK	3000	WATTS
Peak Forward Surge Current 8.3ms single half sine-wave @ $T_J = 25^\circ\text{C}$ (Note 2)	I _{FSM}	300	AMPS.
Steady State Power Dissipation at $T_L = 120^\circ\text{C}$ lead lengths 0.375" (9.5mm), see fig.6	P _{M(AV)}	3.5	WATTS
Operating Temperature Range	T _J	-55 to +175	°C
Storage Temperature Range	T _{STG}	-55 to +175	°C

NOTES : 1. Non-repetitive current pulse, per Fig. 3 and derated above $T_J = 25^\circ\text{C}$ per Fig.1.
 2. Only for unidirectional units.

REV. 4, Nov-2010, KDIG02



Type Number	Type Number	Reverse Standoff Voltage	Breakdown Voltage BV Volts @It			Max. Reverse Leakage @VR	Max. Clamping Voltage @Ipp	Max. Peak Pulse Current
			(UNI)	(BI)	VR (V)			
3KP5.0	3KP5.0C	5	6.40	7.82	10	1000.0	9.6	312.5
3KP5.0A	3KP5.0CA	5	6.40	7.07	10	1000.0	9.2	326.1
3KP6.0	3KP6.0C	6	6.67	8.15	10	1000.0	11.4	263.2
3KP6.0A	3KP6.0CA	6	6.67	7.37	10	1000.0	10.3	291.3
3KP6.5	3KP6.5C	6.5	7.22	8.82	10	500.0	12.3	243.9
3KP6.5A	3KP6.5CA	6.5	7.22	7.98	10	500.0	11.2	267.9
3KP7.0	3KP7.0C	7	7.78	9.51	10	200.0	13.3	225.6
3KP7.0A	3KP7.0CA	7	7.78	8.60	10	200.0	12.0	250.0
3KP7.5	3KP7.5C	7.5	8.33	10.18	1	100.0	14.3	209.8
3KP7.5A	3KP7.5CA	7.5	8.33	9.21	1	100.0	12.9	232.6
3KP8.0	3KP8.0C	8	8.89	10.86	1	50.0	15.0	200.0
3KP8.0A	3KP8.0CA	8	8.89	9.83	1	50.0	13.6	220.6
3KP8.5	3KP8.5C	8.5	9.44	11.54	1	25.0	15.9	188.7
3KP8.5A	3KP8.5CA	8.5	9.44	10.43	1	25.0	14.4	208.3
3KP9.0	3KP9.0C	9	10.00	12.22	1	10.0	16.9	177.5
3KP9.0A	3KP9.0CA	9	10.00	11.05	1	10.0	15.4	194.8
3KP10	3KP10C	10	11.10	13.56	1	5.0	18.8	159.6
3KP10A	3KP10CA	10	11.10	12.27	1	5.0	17.0	176.5
3KP11	3KP11C	11	12.20	14.9	1	5.0	20.1	149.3
3KP11A	3KP11CA	11	12.20	13.5	1	5.0	18.2	164.8
3KP12	3KP12C	12	13.30	16.3	1	5.0	22.0	136.4
3KP12A	3KP12CA	12	13.30	14.7	1	5.0	19.9	150.8
3KP13	3KP13C	13	14.40	17.6	1	5.0	23.8	126.1
3KP13A	3KP13CA	13	14.40	15.9	1	5.0	21.5	139.5
3KP14	3KP14C	14	15.60	19.1	1	5.0	25.8	116.3
3KP14A	3KP14CA	14	15.60	17.2	1	5.0	23.2	129.3
3KP15	3KP15C	15	16.70	20.4	1	5.0	26.9	111.5
3KP15A	3KP15CA	15	16.70	18.5	1	5.0	24.2	124.0
3KP16	3KP16C	16	17.80	21.8	1	5.0	28.8	104.2
3KP16A	3KP16CA	16	17.80	19.7	1	5.0	26.0	115.4
3KP17	3KP17C	17	18.90	23.1	1	5.0	30.5	98.4
3KP17A	3KP17CA	17	18.90	20.9	1	5.0	27.6	108.7
3KP18	3KP18C	18	20.00	24.4	1	5.0	32.2	93.2
3KP18A	3KP18CA	18	20.00	22.1	1	5.0	29.2	102.7
3KP20	3KP20C	20	22.20	27.1	1	5.0	35.8	83.8
3KP20A	3KP20CA	20	22.20	24.5	1	5.0	32.4	92.6
3KP22	3KP22C	22	24.40	29.8	1	5.0	39.4	76.1
3KP22A	3KP22CA	22	24.40	27.0	1	5.0	35.5	84.5
3KP24	3KP24C	24	26.70	32.6	1	5.0	43.0	69.8
3KP24A	3KP24CA	24	26.70	29.5	1	5.0	38.9	77.1
3KP26	3KP26C	26	28.9	35.3	1	5	46.6	64.4
3KP26A	3KP26CA	26	28.9	31.9	1	5	42.1	71.3

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			(UNI)	(BI)	VR (V)			
3KP28	3KP28C	28	31.1	38.0	1	5	50.0	60.0
3KP28A	3KP28CA	29	31.1	34.4	1	5	45.4	66.1
3KP30	3KP30C	30	33.3	40.7	1	5	53.5	56.1
3KP30A	3KP30CA	30	33.3	36.8	1	5	48.4	62.0
3KP33	3KP33C	33	36.7	44.8	1	5	59.0	50.8
3KP33A	3KP33CA	33	36.7	40.6	1	5	53.3	56.3
3KP36	3KP36C	36	40	48.9	1	5	64.3	46.7
3KP36A	3KP36CA	36	40	44.2	1	5	58.1	51.6
3KP40	3KP40C	40	44.4	54.3	1	5	71.4	42.0
3KP40A	3KP40CA	40	44.4	49.1	1	5	64.5	46.5
3KP43	3KP43C	43	47.8	58.4	1	5	76.7	39.1
3KP43A	3KP43CA	43	47.8	52.8	1	5	69.4	43.2
3KP45	3KP45C	45	50	61.1	1	5	80.3	37.4
3KP45A	3KP45CA	45	50	55.3	1	5	72.7	41.3
3KP48	3KP48C	48	53.3	65.1	1	5	85.5	35.1
3KP48A	3KP48CA	48	53.3	58.9	1	5	77.4	38.8
3KP51	3KP51C	51	56.7	69.3	1	5	91.1	32.9
3KP51A	3KP51CA	51	56.7	62.7	1	5	82.4	36.4
3KP54	3KP54C	54	60	73.3	1	5	96.3	31.2
3KP54A	3KP54CA	54	60	66.3	1	5	87.1	34.4
3KP58	3KP58C	58	64.4	78.7	1	5	103.0	29.1
3KP58A	3KP58CA	58	64.4	71.2	1	5	93.6	32.1
3KP60	3KP60C	60	66.7	81.5	1	5	107.0	28.0
3KP60A	3KP60CA	60	66.7	73.7	1	5	96.8	31.0
3KP64	3KP64C	64	71.1	86.9	1	5	114.0	26.3
3KP64A	3KP64CA	64	71.1	78.6	1	5	103.0	29.1
3KP70	3KP70C	70	77.8	95.1	1	5	125.0	24.0
3KP70A	3KP70CA	70	77.8	86.0	1	5	113.0	26.5
3KP75	3KP75C	75	83.3	101.8	1	5	134.0	22.4
3KP75A	3KP75CA	75	83.3	92.1	1	5	121.0	24.8
3KP78	3KP78C	78	86.7	105.9	1	5	139.0	21.6
3KP78A	3KP78CA	78	86.7	95.8	1	5	126.0	23.8
3KP85	3KP85C	85	94.4	115.4	1	5	151.0	19.9
3KP85A	3KP85CA	85	94.4	104.3	1	5	137.0	21.9
3KP90	3KP90C	90	100	122.2	1	5	160.0	18.8
3KP90A	3KP90CA	90	100	110.5	1	5	146.0	20.5
3KP100	3KP100C	100	111	135.6	1	5	179.0	16.8
3KP100A	3KP100CA	100	111	122.7	1	5	162.0	18.5
3KP110	3KP110C	110	122.0	149.1	1	5	196.0	15.3
3KP110A	3KP110CA	110	122.0	134.8	1	5	177.0	16.9
3KP120	3KP120C	120	133.0	162.5	1	5	214.0	14.0
3KP120A	3KP120CA	120	133.0	147.0	1	5	193.0	15.5
3KP130	3KP130C	130	144.0	176.0	1	5	231.0	13.0
3KP130A	3KP130CA	130	144.0	159.2	1	5	209.0	14.4

Type Number	Type Number	Reverse Standoff Voltage	Breakdown Voltage BV Volts @It			Max. Reverse Leakage @VR	Max. Clamping Voltage @Ipp	Max. Peak Pulse Current
			Min (V)	Max (V)	It (mA)			
(UNI)	(BI)	VR (V)	Min (V)	Max (V)	It (mA)	IR (uA)	Vc (V)	Ipp (A)
3KP150	3KP150C	150	167.0	204.1	1	5	268.0	11.2
3KP150A	3KP150CA	150	167.0	184.6	1	5	243.0	12.3
3KP160	3KP160C	160	178.0	217.5	1	5	287.0	10.5
3KP160A	3KP160CA	160	178.0	196.7	1	5	259.0	11.6
3KP170	3KP170C	170	189.0	231.0	1	5	304.0	9.9
3KP170A	3KP170CA	170	189.0	208.9	1	5	275.0	10.9
3KP180	3KP180C	180	198.0	242.0	1	5	322.0	9.3
3KP180A	3KP180CA	180	198.0	218.8	1	5	292.0	10.3
3KP190	3KP190C	190	209.0	255.4	1	5	340.0	8.8
3KP190A	3KP190CA	190	209.0	231.0	1	5	308.0	9.7
3KP200	3KP200C	200	220.0	268.8	1	5	358.0	8.4
3KP200A	3KP200CA	200	220.0	243.2	1	5	324.0	9.3
3KP210	3KP210C	210	231.0	282.3	1	5	376.0	8.0
3KP210A	3KP210CA	210	231.0	255.3	1	5	340.0	8.8
3KP220	3KP220C	220	242.0	295.7	1	5	394.0	7.6
3KP220A	3KP220CA	220	242.0	267.5	1	5	356.0	8.4

NOTES:

Suffix 'C' denotes bidirectional device. Suffix 'A' denotes 5% tolerance device, no suffix denotes 10% tolerance device .

For bidirectional devices having VR of 10 volts and under, the IR limit is doubled .

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