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30KPxxA SERIES

TRANSIENT VOLTAGE SUPPRESSOR

V_R : 26 - 400 Volts

P_{PK} : 30,000 Watts

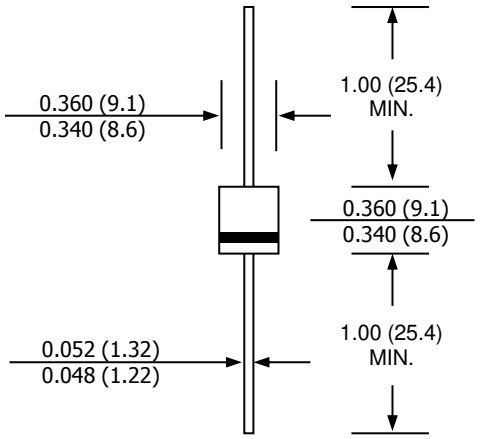
FEATURES :

* Glass passivated junction chip
* Excellent Clamping Capability
* Fast Response Time
* Low Leakage Current
* Pb / RoHS Free

MECHANICAL DATA

* Case : Void-free molded plastic body
* Epoxy : UL94V-0 rate flame retardant
* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
* Polarity : Color band denotes cathode end except Bipolar.
* Mounting position : Any
* Weight : 2.1 grams

D6



Dimensions in inches and (millimeters)

MAXIMUM RATINGS (Ta = 25 °C)

Rating	Symbol	Value	Unit
Peak Pulse Power Dissipation (10 x 1000µs, see Fig.2)	P_{PK}	30,000	W
Steady State Power Dissipation	P_D	7	W
Operating and Storage Temperature Range	T_J, T_{STG}	- 55 to + 175	°C

Fig. 1 - Pulse Derating Curve

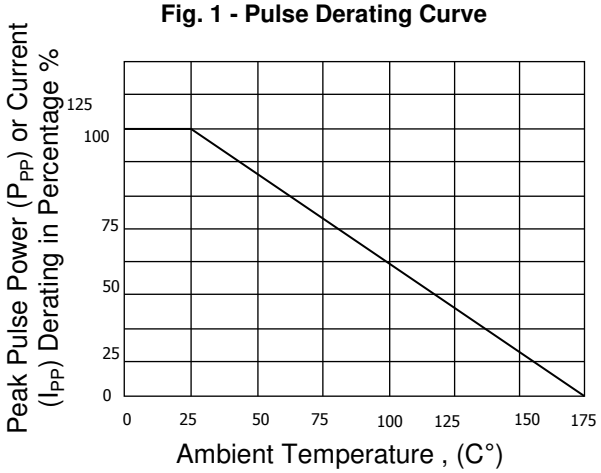
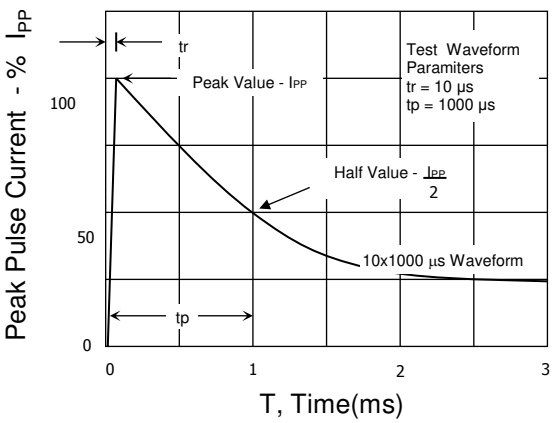


Fig. 2 - Pulse Wave Form



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ELECTRICAL CHARACTERISTICS (Rating at 25 °C ambient temperature unless otherwise specified)

Part Number (Uni-directional)	Reverse Stand Off Voltage	Breakdown Voltage @ $I_{(BR)}$			Maximum Reverse Leakage @ V_{WM}	Maximum Clamping Voltage @ I_{PP}	Maximum Peak Pulse Current	Maximum $V_{(BR)}$ Temperature Coefficient
	V_{WM}	V_{BR} (V)		$I_{(BR)}$	I_D	V_C	I_{PP}	$\alpha_{V(BR)}$
	(V)	Min.	Max.	(mA)	(μA)	(V)	(A)	(mV/°C)
30KP26	26	28.9	35.3	50	10000	48.7	616	32
30KP26A	26	28.9	31.9	50	10000	44.0	682	29
30KP28	28	31.1	38.0	50	8000	52.4	572	35
30KP28A	28	31.1	34.4	50	8000	47.5	632	31
30KP30	30	33.3	40.7	50	8000	56.2	534	37
30KP30A	30	33.3	36.9	50	8000	50.7	592	33
30KP33	33	36.7	44.9	50	5000	64.6	496	42
30KP33A	33	36.7	40.6	50	5000	58.6	548	38
30KP36	36	40.0	48.9	50	5000	68.2	454	46
30KP36A	36	40.0	44.2	50	5000	61.8	502	41
30KP39	39	43.6	53.2	20	2000	69.1	434	48
30KP39A	39	43.6	48.2	20	2000	67.2	451	43
30KP40	40	44.4	54.3	20	1500	75.8	412	51
30KP40A	40	44.4	49.1	20	1500	68.6	456	46
30KP43	43	47.8	58.4	10	500	79.0	380	55
30KP43A	43	47.8	52.8	10	500	71.0	430	50
30KP45	45	50.0	61.1	5	150	80.7	372	57
30KP45A	45	50.0	55.3	5	150	73.0	410	52
30KP48	48	53.3	65.1	5	150	85.9	350	62
30KP48A	48	53.3	58.9	5	150	77.7	386	56
30KP51	51	56.7	69.3	5	50	91.5	328	66
30KP51A	51	56.7	62.7	5	50	82.8	362	60
30KP54	54	60.0	73.3	5	25	96.8	310	70
30KP54A	54	60.0	66.3	5	25	87.5	342	63
30KP58	58	64.4	78.7	5	15	104	288	76
30KP58A	58	64.4	71.2	5	15	94	320	68
30KP60	60	66.7	81.5	5	15	107	280	78
30KP60A	60	66.7	73.7	5	15	97.3	304	71
30KP64	64	71.1	86.9	5	10	115	260	84
30KP64A	64	71.1	78.6	5	10	104	288	76
30KP70	70	77.8	95.1	5	10	126	238	92
30KP70A	70	77.8	86.0	5	10	114	264	83
30KP75	75	83.3	102	5	10	135	222	100
30KP75A	75	83.3	92.1	5	10	122	246	89
30KP78	78	86.7	106	5	10	140	214	104
30KP78A	78	86.7	95.8	5	10	126	238	93
30KP85	85	94.4	115	5	10	152	198	113
30KP85A	85	94.4	104	5	10	137	218	102
30KP90	90	100	122	5	10	160	188	120
30KP90A	90	100	111	5	10	146	206	109
30KP100	100	111	136	5	10	179	168	134
30KP100A	100	111	123	5	10	162	186	121
30KP110	110	122	149	5	10	196	154	147
30KP110A	110	122	135	5	10	178	168	133

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ELECTRICAL CHARACTERISTICS (Rating at 25 °C ambient temperature unless otherwise specified)

Part Number (Uni-directional)	Reverse Stand Off Voltage	Breakdown Voltage @ $I_{(BR)}$			Maximum Reverse Leakage @ V_{WM}	Maximum Clamping Voltage @ I_{PP}	Maximum Peak Pulse Current	Maximum $V_{(BR)}$ Temperature Coefficient
	V_{WM}	V_{BR} (V)		$I_{(BR)}$	I_D	V_C	I_{PP}	$\alpha_{V(BR)}$
	(V)	Min.	Max.	(mA)	(μA)	(V)	(A)	(mV/°C)
30KP120	120	133	163	5	10	214	140	161
30KP120A	120	133	147	5	10	193	156	145
30KP130	130	144	176	5	10	231	130	174
30KP130A	130	144	159	5	10	209	142	157
30KP150	150	167	204	5	10	268	112	202
30KP150A	150	167	185	5	10	243	124	183
30KP160	160	178	218	5	10	287	104	216
30KP160A	160	178	197	5	10	259	116	195
30KP170	170	189	231	5	10	304	98	229
30KP170A	170	189	209	5	10	275	110	207
30KP180	180	200	244	5	10	321	94	242
30KP180A	180	200	221	5	10	291	104	219
30KP200	200	222	271	5	10	356	84	269
30KP200A	200	222	245	5	10	322	94	243
30KP220	220	245	299	5	10	393	76	297
30KP220A	220	245	271	5	10	356	84	269
30KP250	250	278	339	5	10	441	68	334
30KP250A	250	278	308	5	10	403	74	306
30KP260	260	289	353	5	10	460	65	346
30KP260A	260	289	320	5	10	419	71	318
30KP280	280	311	379	5	10	498	60	372
30KP280A	280	311	345	5	10	451	66	344
30KP300	300	333	406	5	10	535	56	396
30KP300A	300	333	369	5	10	483	62	368
30KP320	320	356	434	5	10	588	51	398
30KP320A	320	356	392	5	10	530	57	370
30KP350	350	389	475	5	10	637	47	458
30KP350A	350	389	431	5	10	564	53	430
30KP360	360	400	488	5	10	635	47	408
30KP360A	360	400	436	5	10	567	53	380
30KP400	400	444	542	5	10	730	41	518
30KP400A	400	444	492	5	10	644	46	490

Note : (1) For bidirectional type having V_{WM} of 60 volts and less, the I_D limit is double.

Fig. 3 - Peak Pulse Power vs. Pulse

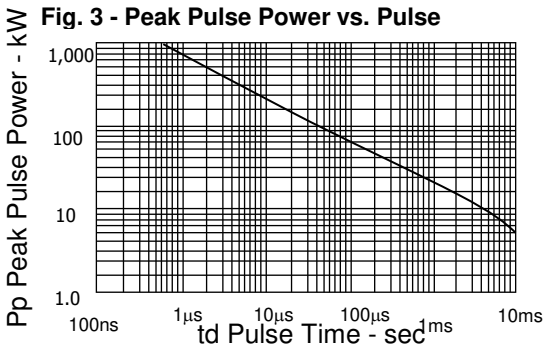


Fig. 4 - Typical Capacitance vs. Breakdown Voltage

