

30000W PEAK POWER AXIAL LEAD TRANSIENT VOLTAGE SUPPRESSORS

30KP28A/CA - 30KP288A/CA

R-6

Plastic Leaded Package



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Features

- 1). Glass Passivated Junction
- 2). 30000W Peak Pulse Power Capability on 10/1000 μ s Waverform
- 3). Excellent Clamping Capability
- 4). Repetition Rate (Duty Cycle) : 0.05%
- 5). Low Incremental Surge Resistance
- 6). Fast Response Time : Typically Less than 1.0ps from 0V to BV
- 7). Colour Band Denotes Cathode end for Uni Directional Device

MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power Dissipation on 10/1000 μ s Waveform (Note 1)	P_{PPM}	Min 30000	W
Peak Pulse Current of on 10/1000 μ s Waverform (Note 1)	I_{PPM}	Specified	A
Peak Forward Surge Current, 8.3ms single Half Sine Wave Superimposed on Rated Load, (Note 3)	I_{FSM}	400	A
Steady State Power Dissipation at $T_L=75^\circ$, Lead Length 0.375"(9.5mm) (Note 2)	$P_M(AV)$	8	W
Operating Junction Temperature Range	T_J	-55 to 175	$^\circ$ C
Storage Temperature Range	T_{STG}	-55 to 175	$^\circ$ C

Note :

- 1). Non-repetitive Current Pulse, per Fig3 and Derated above $T_A = 25^\circ$ C per Fig 2.
- 2). Mounted on Copper Pad area of 0.8*0.8" (20*20mm).
- 3). 8.5ms Single Half Sine wave or Equivalent Square Wave, Duty Cycle = 4 pulses per minute maximum.

30KP28_288A_CA Rev0 230313E



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Type Number		Reverse Stand-Off Voltage	Breakdown Voltage Min. @ I_T	Test Current	Maximum Clamping Voltage @ I_{pp}	Peak Pulse Current	Reverse Leakage @ V_{RWM}
(Uni)	(Bi)	$V_{RWM}(V)$	$V_{BR MIN}(V)$	$I_T (mA)$	$V_C(V)$	$I_{pp}(A)$	$I_R(\mu A)$
30KP28A	30KP28CA	28	31.3	50	50.0	606.0	5000
30KP30A	30KP30CA	30	33.5	50	55.2	548.9	5000
30KP33A	30KP33CA	33	36.9	50	58.5	517.2	5000
30KP36A	30KP36CA	36	40.2	50	61.8	490.3	5000
30KP39A	30KP39CA	39	43.6	20	67.2	450.9	2000
30KP42A	30KP42CA	42	46.9	10	72.0	420.8	1000
30KP43A	30KP43CA	43	48.0	10	73.0	415.1	1000
30KP45A	30KP45CA	45	50.3	5	77.4	391.5	250
30KP48A	30KP48CA	48	53.6	5	81.6	371.3	150
30KP51A	30KP51CA	51	57.0	5	86.4	350.7	50
30KP54A	30KP54CA	54	60.3	5	91.4	331.5	20
30KP58A	30KP58CA	58	64.8	5	92.4	327.9	20
30KP60A	30KP60CA	60	67.0	5	102.0	297.1	15
30KP64A	30KP64CA	64	71.5	5	104.0	291.3	10
30KP66A	30KP66CA	66	73.7	5	107.0	283.2	10
30KP70A	30KP70CA	70	78.2	5	109.0	278.0	10
30KP71A	30KP71CA	71	79.3	5	111.5	271.7	10
30KP72A	30KP72CA	72	80.4	5	114.0	265.8	10
30KP75A	30KP75CA	75	83.8	5	119.4	253.8	10
30KP78A	30KP78CA	78	87.1	5	129.0	234.0	10
30KP84A	30KP84CA	84	93.8	5	139.2	217.7	10
30KP90A	30KP90CA	90	100.5	5	146.4	207.0	10
30KP96A	30KP96CA	96	107.2	5	156.0	194.2	10
30KP102A	30KP102CA	102	113.9	5	165.6	183.0	10
30KP108A	30KP108CA	108	120.6	5	175.2	172.9	10
30KP120A	30KP120CA	120	134.0	5	194.4	155.9	10
30KP132A	30KP132CA	132	147.4	5	213.0	142.3	10
30KP144A	30KP144CA	144	160.8	5	223.2	135.8	10
30KP150A	30KP150CA	150	167.6	5	233.4	129.8	10
30KP156A	30KP156CA	156	174.3	5	245.0	123.7	10
30KP160A	30KP160CA	160	178.7	5	252.6	120.0	10
30KP168A	30KP168CA	168	187.7	5	272.4	111.2	10
30KP170A	30KP170CA	170	189.9	5	275.0	110.2	10
30KP180A	30KP180CA	180	201.1	5	290.4	104.3	10
30KP198A	30KP198CA	198	221.2	5	319.8	94.7	10
30KP216A	30KP216CA	216	241.3	5	348.6	86.9	10
30KP240A	30KP240CA	240	268.1	5	387.0	78.3	10
30KP258A	30KP258CA	258	288.2	5	416.4	72.8	10
30KP260A	30KP260CA	260	290.4	5	416.0	72.8	10
30KP270A	30KP270CA	270	301.6	5	436.2	69.5	10
30KP280A	30KP280CA	280	312.8	5	464.0	65.3	10
30KP288A	30KP288CA	288	321.7	5	469.9	64.5	10

For Bi-directional type having V_{RWM} of 40V and less, I_R Limit is Double.

For parts without A, V_{BR} is $\pm 10\%$

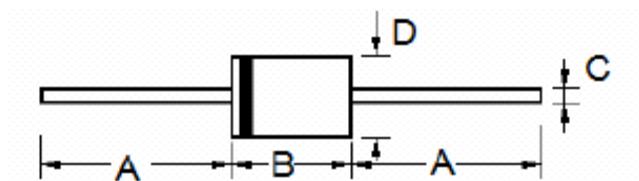
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R-6 PACKAGE DIMENSION



REF.	DIMENSIONS			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	25.4	---	1.000	---
B	8.6	9.1	0.340	0.360
C	1.2	1.3	0.048	0.052
D	8.6	9.1	0.340	0.360

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CHACTERISTICS CURVES

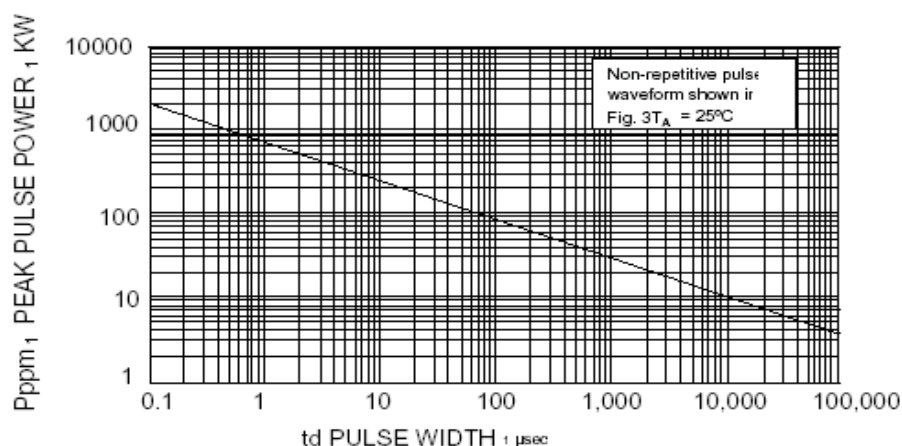


FIG. 1 PEAK PULSE POWER RATING

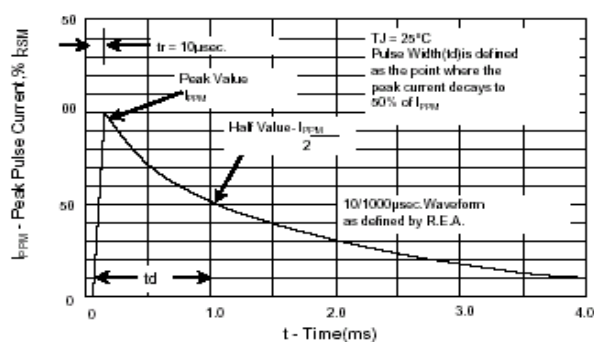
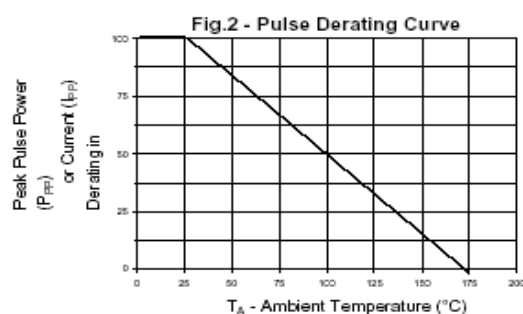


Fig.3 - Pulse Waveform



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Customer Notes

Disclaimer

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