

Glass Passivated Junction Transient Voltage Suppressor

P_{PP} 30000W

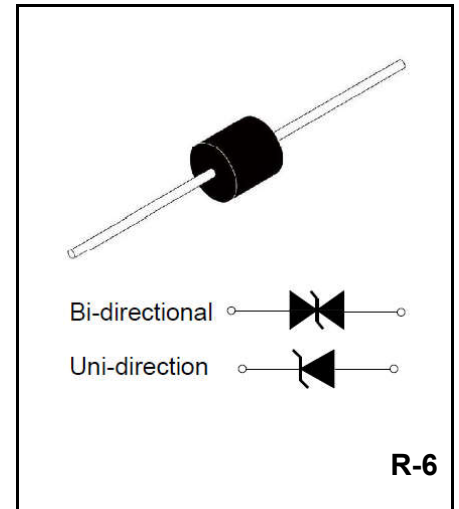
V_{RWM} 28V~360V

FEATURES

- ◆ Plastic package has Underwriters Laboratory
- ◆ Flammability Classification 94V-0
- ◆ Glass passivated junction
- ◆ 30000W Peak Pulse Power
- ◆ capability on 10/1000 μs waveform
- ◆ Excellent clamping capability
- ◆ Repetition rate (duty cycle):0.05%
- ◆ Low incremental surge resistance
- ◆ Fast response time: typically less than 1.0 ps from 0 volts to BV
- ◆ Typical Id less than 1μA above 10V
- ◆ High temperature soldering guaranteed: 265°C/10 seconds/.375", (9.5mm) lead length, 5lbs., (2.3kg) tension

MECHANICAL DATA

- ◆ Case: Molded plastic over glass passivated junction Terminals: Plated Axial leads, solderable perMIL-STD-750, Method 2026
- ◆ Polarity: Color band denoted positive end (cathode) except Bipolar
- ◆ Mounting Position: Any Weight: 0.07 ounce, 2.1 gram



Maximum Ratings and Characteristics @ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Pulse Power Dissipation on 10/1000 us Waveform (Note 1)	P_{PPM}	30000	W
Peak Forward Surge Current, 8.3ms Sine-Wave Superimposed on Rated Load, (JEDEC Method) (Note 3)	I_{FSM}	400	A
Peak Pulse Current of on 10/1000us Waveform (Note 1)	I_{PPM}	See Next Table	A
Steady State Power Dissipation at T _L =75 °C Lead Lengths.375", (9.5mm) (Note 2)	P_{M(AV)}	8.0	W
Operating junction and storage Temperature range	T_J,T_{STG}	-55 to +175	°C

Notes:

1. Non-repetitive current pulse, per Fig.3 and derated above T_A=25°C per Fig.2.
2. Mounted on Copper Pad area of 0.8x0.8" (20x20mm) per Fig.5.
3. 8.3ms single half sine-wave, or equivalent square wave, Duty cycle=4 pulses per minutes maximum

Electrical Specification (T_A=25@25°C unless otherwise specified)

Part Number		Reverse Stand-Off Voltage	Breakdown Voltage @IT		Test Current	Maximum Clamping Voltage @IPP (V)	Maximum Peak Pulse Current	Maximum Reverse Leakage @VRWM	Package
Uni	Bi	VRWM (V)	VBR MIN(V)	VBR MAX(V)	IT (mA)	VC(V)	IPP (A)	IR(μA)	
30KP28A	30KP28CA	28	31.28	34.41	50	50	606	5000	R6/P600
30KP30A	30KP30CA	30	33.51	36.86	50	55.2	548.9	5000	R6/P600
30KP33A	30KP33CA	33	36.9	40.59	50	58.5	517.9	5000	R6/P600
30KP36A	30KP36CA	36	40.2	44.22	50	61.8	490.3	5000	R6/P600
30KP39A	30KP39CA	39	43.6	47.96	20	67.2	450.9	2000	R6/P600
30KP42A	30KP42CA	42	46.9	51.59	10	72	420.8	1000	R6/P600
30KP43A	30KP43CA	43	48	52.8	10	73	415.1	1000	R6/P600
30KP45A	30KP45CA	45	50.3	55.33	5	77.4	391.5	250	R6/P600
30KP48A	30KP48CA	48	53.6	58.96	5	81.6	371.3	150	R6/P600
30KP51A	30KP51CA	51	57	62.7	5	86.4	350.7	50	R6/P600
30KP54A	30KP54CA	54	60.3	66.33	5	91.4	331.5	20	R6/P600
30KP58A	30KP58CA	58	64.8	71.28	5	92.4	327.9	20	R6/P600
30KP60A	30KP60CA	60	67	73.7	5	102	297.1	15	R6/P600
30KP64A	30KP64CA	64	71.5	78.65	5	104	291.3	10	R6/P600
30KP66A	30KP66CA	66	73.7	81.07	5	107	283.2	5	R6/P600
30KP70A	30KP70CA	70	78.2	86.02	5	109	278	5	R6/P600
30KP71A	30KP71CA	71	79.3	87.23	5	111.5	271.7	5	R6/P600
30KP72A	30KP72CA	72	80.4	88.44	5	114	265.8	5	R6/P600
30KP75A	30KP75CA	75	83.8	92.18	5	119.4	253.8	5	R6/P600
30KP78A	30KP78CA	78	87.1	95.81	5	129	234.9	5	R6/P600
30KP84A	30KP84CA	84	93.8	103.18	5	139.2	217.7	5	R6/P600
30KP90A	30KP90CA	90	100.5	110.55	5	146.4	207	5	R6/P600
30KP96A	30KP96CA	96	107.2	117.92	5	156	194.2	5	R6/P600
30KP102A	30KP102CA	102	113.9	125.29	5	165.6	183	5	R6/P600
30KP108A	30KP108CA	108	120.6	132.66	5	175.2	172.9	5	R6/P600
30KP120A	30KP120CA	120	134	147.4	5	194.4	155.9	5	R6/P600
30KP132A	30KP132CA	132	147.4	162.14	5	213	142.3	5	R6/P600
30KP144A	30KP144CA	144	160.8	176.88	5	223.2	135.8	5	R6/P600
30KP150A	30KP150CA	150	167.6	184.36	5	233.4	129.8	5	R6/P600
30KP156A	30KP156CA	156	174.3	191.73	5	245	123.7	5	R6/P600
30KP160A	30KP160CA	160	178.7	196.57	5	252.6	120	5	R6/P600
30KP168A	30KP168CA	168	187.7	206.47	5	272.4	111.2	5	R6/P600
30KP170A	30KP170CA	170	189.9	208.89	5	275	110.2	5	R6/P600
30KP180A	30KP180CA	180	201.1	221.21	5	290.4	104.3	5	R6/P600
30KP198A	30KP198CA	198	221.2	243.32	5	319.8	94.7	5	R6/P600
30KP216A	30KP216CA	216	241.3	265.43	5	348.6	86.9	5	R6/P600
30KP240A	30KP240CA	240	268.1	294.91	5	387	78.3	5	R6/P600
30KP258A	30KP258CA	258	288.2	317.02	5	416.4	72.8	5	R6/P600
30KP260A	30KP260CA	260	290.4	319.44	5	416	72.8	5	R6/P600
30KP270A	30KP270CA	270	301.6	331.76	5	436.2	69.5	5	R6/P600
30KP280A	30KP280CA	280	312.8	344.08	5	464	65.3	5	R6/P600
30KP288A	30KP288CA	288	321.7	353.87	5	469.9	64.5	5	R6/P600
30KP300A	30KP300CA	300	334	367.4	5	484	62	5	R6/P600
30KP320A	30KP320CA	320	357	391.4	5	530	57.2	5	R6/P600
30KP350A	30KP350CA	350	391	428.1	5	567	53.4	5	R6/P600
30KP360A	30KP360CA	360	402.1	440.3	5	640	47.3	5	R6/P600

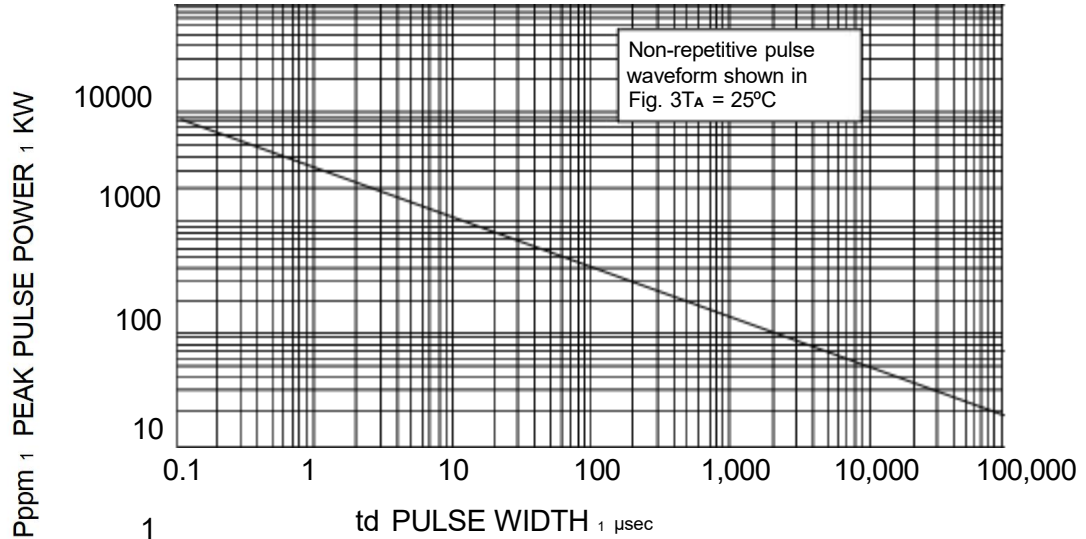


FIG. 1 PEAK PULSE POWER RATING

Fig.2 - Pulse Derating Curve

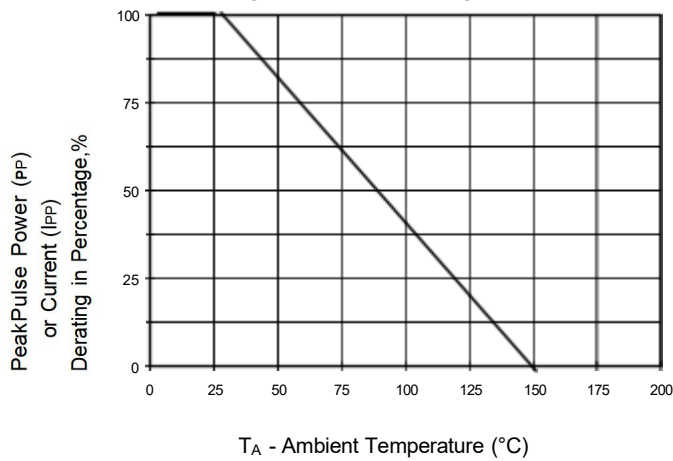
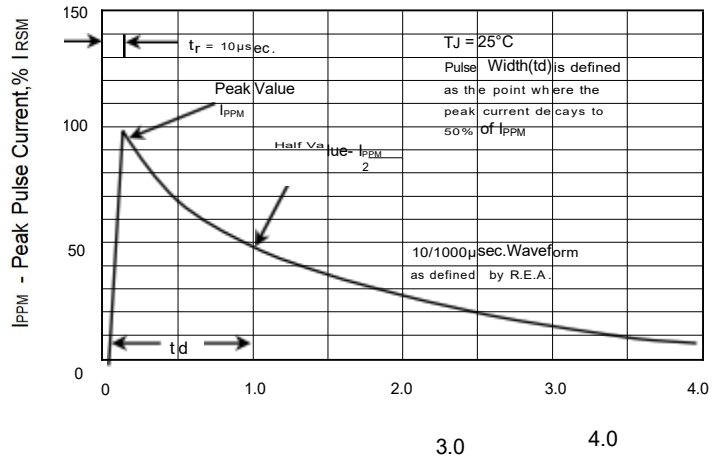
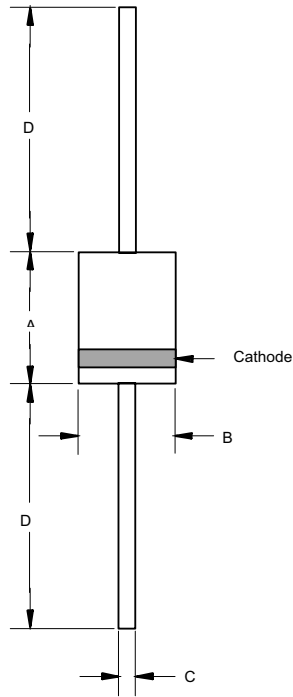


Fig.3 - Pulse Waveform



Package Outline R-6



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.340	.360	8.60	9.10	
B	.340	.360	8.60	9.10	
C	.048	.052	1.20	1.30	
D	1.000	---	25.40	---	

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
R-6	BOX	300	EIA-481-1