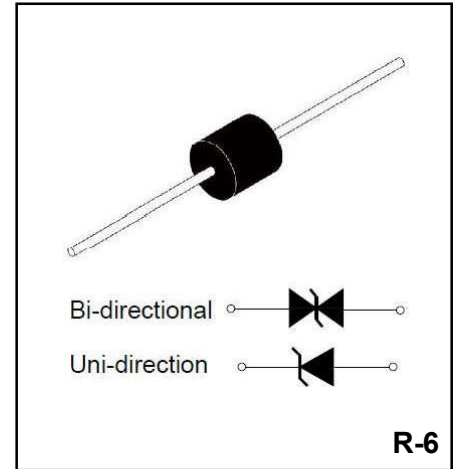


**20000W GLASS PASSIVATED JUNCTION TRANSIENT VOLTAGE SUPPRESSOR**

**Peak Pulse Power: 20000 W**  
**Reverse Voltage: 20 V to 300 V**

**FEATURES**

- † Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- † Glass passivated junction
- † 20000W 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 per MIL-STD-750, Method 2026
- † Polarity: Color band denoted positive end (cathode) except Bipolar
- † Mounting Position: Any
- † Weight: 0.07 ounce, 2.1 gram

**DEVICES FOR BIPOLAR APPLICATIONS**

- † For Bidirectional use C or CA Suffix for types 20KP20 thru types 20KP300 Electrical characteristics apply in both directions.

**MAXIMUM RATINGS AND CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.

RATING	SYMBOL	VALUE	UNITS
Peak Pulse Power Dissipation on 10/1000 μs waveform (NOTE 1)	P <sub>PPM</sub>	Minimum 20 000	W
Peak Pulse Current of on 10-1000 μs waveform (NOTE 1)	I <sub>PPM</sub>	SEE TABLE 1	A
Steady State Power Dissipation at T <sub>I</sub> =75 °C Lead Lengths.375", (9.5mm)(NOTE 2)	P <sub>M(AV)</sub>	8.0	W
Peak Forward Surge Current, 8.3ms Sine-Wave Superimposed on Rated Load, (JEDEC Method) (NOTE 3)	I <sub>FSM</sub>	400.0	A
Operatings and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +175	°C

**NOTES:**

- 1.Non-repetitive current pulse, per Fig.3 and derated above Ta=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

Part Number		Reverse Stand-Off Voltage	Breakdown Voltage @IT		Test Current	Maximum Clamping Voltage @IPP (V)	Maximum Peak Pulse Current	Maximum Reverse Leakage @VRWM
Uni	Bi	VRWM (V)	VBR MIN(V)	VBR MAX(V)	IT (mA)	VC(V)	IPP (A)	IR(μA)
20KP20A	20KP20CA	20	22.34	24.38	50	36.8	548.9	5000
20KP24A	20KP24CA	24	26.81	29.26	50	41.2	490.3	5000
20KP26A	20KP26CA	26	29.04	31.26	50	22.7	451.9	2000
20KP28A	20KP28CA	28	31.28	34.13	50	48	420.8	1000
20KP30A	20KP30CA	30	33.51	36.57	5	51.5	392.2	250
20KP32A	20KP32CA	32	35.74	39.01	5	54.3	372	150
20KP34A	20KP34CA	34	38	41.4	5	57.5	351.3	50
20KP36A	20KP36CA	36	40.2	43.9	5	61.5	328.5	20
20KP40A	20KP40CA	40	44.7	48.8	5	67.8	297.9	15
20KP44A	20KP44CA	44	49.1	53.6	5	72.7	277.9	5
20KP48A	20KP48CA	48	53.6	58.5	5	79.4	254.4	5
20KP52A	20KP52CA	52	58.1	63.4	5	85.8	235.4	5
20KP56A	20KP56CA	56	62.6	68.3	5	92.6	218.1	5
20KP60A	20KP60CA	60	67	73.1	5	97.6	207	5
20KP64A	20KP64CA	64	71.5	78.0	5	104	194.2	5
20KP68A	20KP68CA	68	76	82.9	5	110	183.6	5
20KP72A	20KP72CA	72	80.4	87.8	5	116	174.1	5
20KP80A	20KP80CA	80	89.4	97.5	5	130	155.4	5
20KP88A	20KP88CA	88	98.3	107.3	5	142	142.3	5
20KP96A	20KP96CA	96	107.2	117.0	5	155	130.3	5
20KP104A	20KP104CA	104	116.2	126.8	5	168	120.2	5
20KP112A	20KP112CA	112	125.1	136.5	5	182	111	5
20KP120A	20KP120CA	120	134	146.3	5	194	104.1	5
20KP132A	20KP132CA	132	147.4	160.9	5	213	94.8	5
20KP144A	20KP144CA	144	160.8	175.5	5	232	87.1	5
20KP160A	20KP160CA	160	178.7	195.0	5	258	78.3	5
20KP172A	20KP172CA	172	192.1	209.7	5	277	72.9	5
20KP180A	20KP180CA	180	201.1	219.4	5	291	69.4	5
20KP192A	20KP192CA	192	214.5	234.0	5	309	65.4	5
20KP204A	20KP204CA	204	227.9	248.7	5	329	61.4	5
20KP216A	20KP216CA	216	241.3	263.3	5	348	58	5
20KP232A	20KP232CA	232	159.1	282.8	5	374	54	5
20KP240A	20KP240CA	240	268.1	292.6	5	387	52.2	5
20KP256A	20KP256CA	256	286	312.1	5	412	49	5
20KP280A	20KP280CA	280	312.8	341.3	5	451	44.8	5
20KP300A	20KP300CA	300	335.1	365.7	5	483	41.8	5

Series Rating and Characteristics

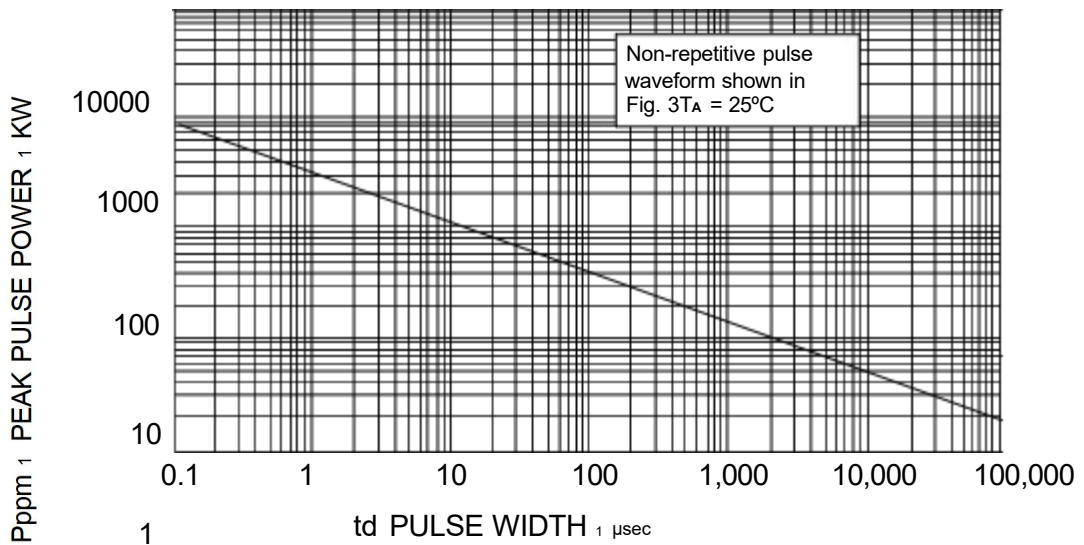
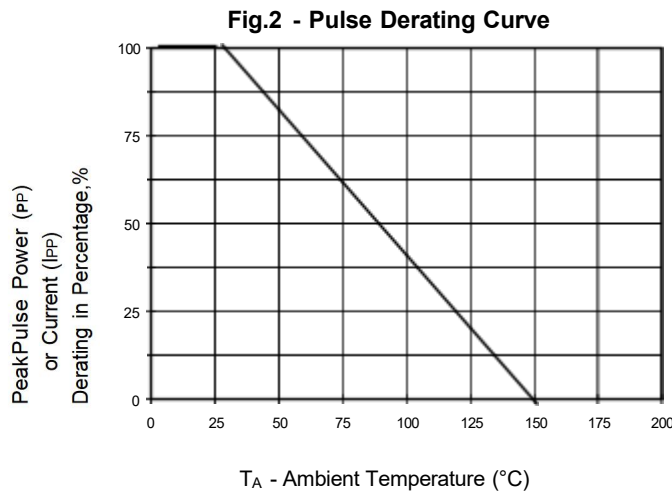
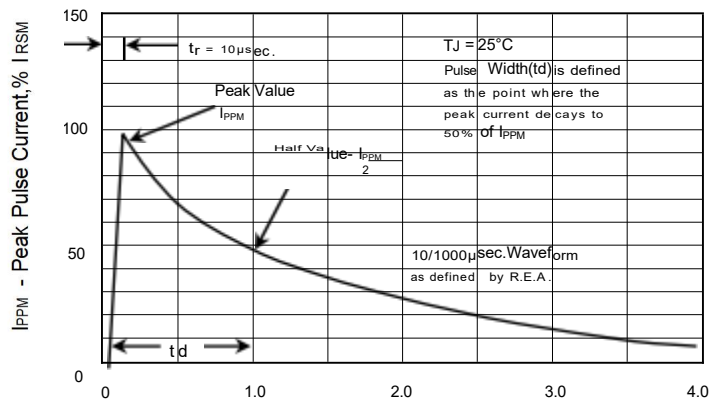


FIG. 1 PEAK PULSE POWER RATING

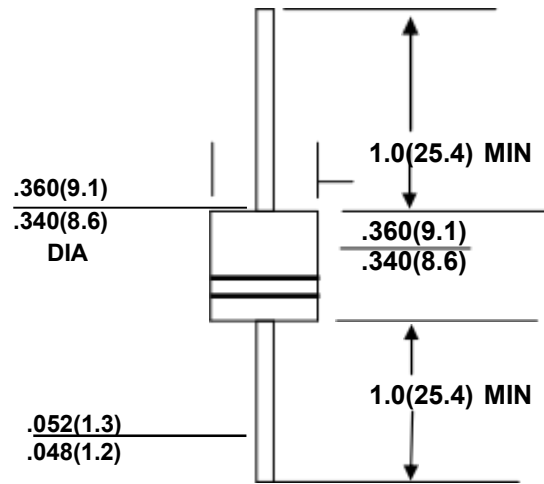


$T_A$  - Ambient Temperature ( $^\circ\text{C}$ )

Fig.3 - Pulse Waveform



Package Outline R-6



Dimensions in inches (millimeters)

Summary of Packing Options

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

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[P6KE13CA](#) [P6KE43CA](#) [P6KE6.8CA](#) [P6KE8.2](#) [P6SMBJ20CA](#) [JANTX1N6072A](#) [SR2835ESKG](#) [SA90CA](#)