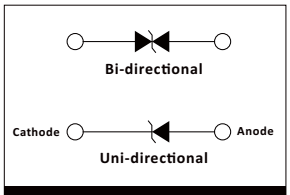
DESCRIPTION

The 20KPA series is designed specifically to protect sensitive electronic equipment from voltage transients induced by lightning and other transient voltage events.

P600 PACKAGE



SCHEMATIC SYMBOL

FEATURES

> Plastic package has underwriters laboratory.
> Flammability classification 94V-0.
> Glass passivated junction.
> 20000W peak pulse power capability on 10/1000μs waveform.
> Excellent clamping capability.
> Low incremental surge resistance.
> Fast response time: typically less than 1.0ps from 0 Volts to V_{BR}
> Typical IR less than 2μA above 10V.

MECHANICAL DATE

> Molded plastic over glass passivated junction.
> Terminals: Axial leads, solderable per MIL-STD-750, Method 2026.
> Polarity: Color band denoted cathode except bidirectional.
> Mounting Position: Any.

APPLICATIONS

TVS devices are ideal for the protection of I/O Interfaces, VCC bus and other vulnerable circuits used in Telecom, Computer, Industrial and Consumer electronic applications.

MAXIMUM RATINGS(T_A=25°C HERWISE NOTED)

RATING	SYMBOL	VALUE	UNITS
Peak Pulse Power Dissipation on 10/1000us waveform (Note1).	P_{PM}	20000	Watts
Peak Pulse Current of on 10/1000us waveform(Note1).	I_{PPM}	See Table	Amps
Steady State Power Dissipation at T_L =75°C , Lead lengths.375",(9.5mm).	P_M(AV)	8.0	Watts
Peak Forward Surge Current,8.3ms Single Half Sine-Wave Superimposed on Rated Load, (JEDEC Method) (Note 2).	I_{FSM}	400	Amps
Operating Temperature Range.	T_J	-55~+175	°C
Storage Temperature Range.	T_{STG}	-55~+175	°C
Typical Thermal Risistance Junction to Ambient	$R_{\theta JA}$	40	°C/W

NOTES:
1. Non-repetitive current pulse, T_A = 25℃.
2. 8.3ms single half sine-wave, or equivalent square wave, Duty cycle=4 pulses per minutes maximum.

ELECTRICAL CHARACTERISTICS

Part Number		Reverse Stand-off Voltage	Breakdown Voltage Min.@I_T	Breakdown Voltage Max.@I_T	Test Current	Maximum Clamping Voltage @I_{PP}	Peak Pulse Current	Reverse Leakage @V_{RWM}
Uni-Polar	Bi-Polar	V_{RWM}(V)	V_{BR}(V)	V_{BR}(V)	I_T(mA)	V_C(V)	I_{PP}(A)	I_R(uA)
20KPA26A	20KPA26CA	26.0	29.04	32.42	50	44.7	451.9	2000
20KPA28A	20kPA28CA	28.0	31.28	34.92	50	48.0	420. 8	1000
20KPA30A	20KPA30CA	30.0	33.51	37.41	5	51.5	392.2	250
20KPA33A	20KPA33CA	33.0	36.70	41.42	5	53.3	375.2	50
20kPA36A	20KPA36CA	36.0	40.20	44.88	5	61.5	328.5	20
20KPA40A	20KPA40CA	40.0	44.70	49.90	5	67.8	297.9	15
20KPA44A	20KPA44CA	44.0	49.10	54.81	5	72.7	277.9	2
20KPA48A	20KPA48CA	48.0	53.60	59.83	5	79.4	254.4	2
20KPA52A	20KPA52CA	52.0	58.10	64.86	5	85.8	235.4	2
20KPA56A	20KPA56CA	56.0	62.60	69.88	5	92.6	218.1	2
20KPA60A	20KPA60CA	60.0	67.00	74.79	5	97.6	207.0	2
20KPA64A	20KPA64CA	64.0	71.50	79.82	5	104.0	194.2	2
20KPA68A	20KPA68CA	68.0	76.00	84.84	5	110.0	183.6	2
20KPA72A	20KPA72CA	72.0	80.40	89.75	5	116.0	174.1	2
20KPA80A	20KPA80CA	80.0	89.40	99.80	5	130.0	155.4	2
20KPA88A	20KPA88CA	88.0	98.30	109.73	5	142.0	142.3	2
20KPA96A	20KPA96CA	96.0	107.20	119.67	5	155.0	130.3	2
20KPA104A	20KPA104CA	104.0	116.20	129.72	5	168.0	120.2	2
20KPA112A	20KPA112CA	112.0	125.10	139.65	5	182.0	111.0	2
20KPA120A	20KPA120CA	120.0	134.0	149.59	5	194.0	104.1	2
20KPA132A	20KPA132CA	132.0	147.40	164.54	5	213.0	94.8	2
20KPA144A	20KPA144CA	144.0	160.80	179.50	5	232.0	87.1	2
20KPA160A	20KPA160CA	160.0	178.70	199.49	5	258.0	78.3	2
20KPA172A	20KPA172CA	172.0	192.10	214.44	5	277.0	72.9	2
20KPA180A	20KPA180CA	180.0	201. 10	224.49	5	291.0	69. 4	2
20KPA192A	20KPA192CA	192.0	214.50	239.45	5	309.0	65.4	2
20KPA204A	20KPA204CA	204.0	227.90	254.41	5	329.0	61.4	2
20KPA216A	20KPA216CA	216.0	241.30	269.37	5	348.0	58.0	2
20KPA232A	20KPA232CA	232.0	259.10	289.24	5	374.0	54.0	2
20KPA240A	20KPA240CA	240.0	268.10	299.28	5	387.0	52.2	2
20KPA256A	20KPA256CA	256.0	286.00	319.27	5	412.0	49.0	2
20KPA280A	20KPA280CA	280.0	312.80	349.18	5	451.0	44.8	2
20KPA300A	20KPA300CA	300.0	335.10	374.08	5	483.0	41.8	2

RATINGS AND CHARACTERISTIC CURVES (T_A=25°C unless otherwise noted)

FIG.1:V-I curve characteristics (UNI-directional)

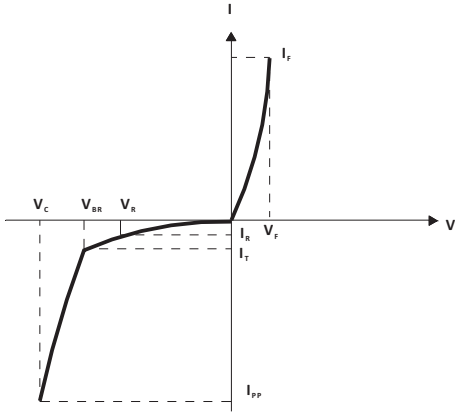


FIG.2:V-I curve characteristics (Bi-directional)

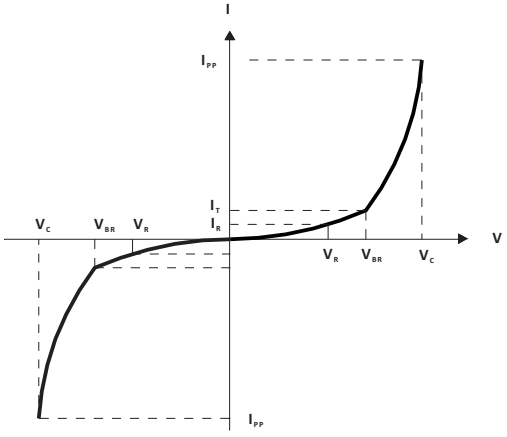


FIG.3:Pulse waveform I_{PPM}(%I_{RSM})

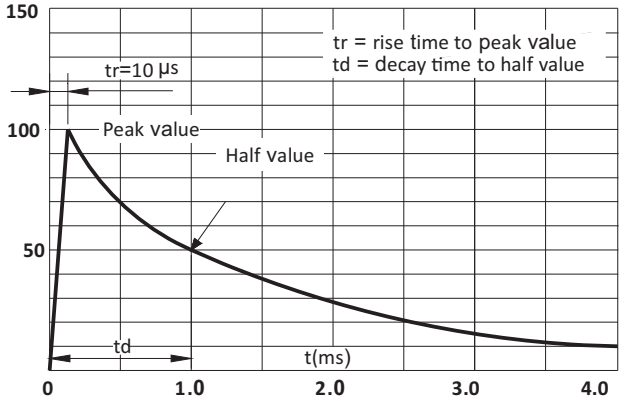
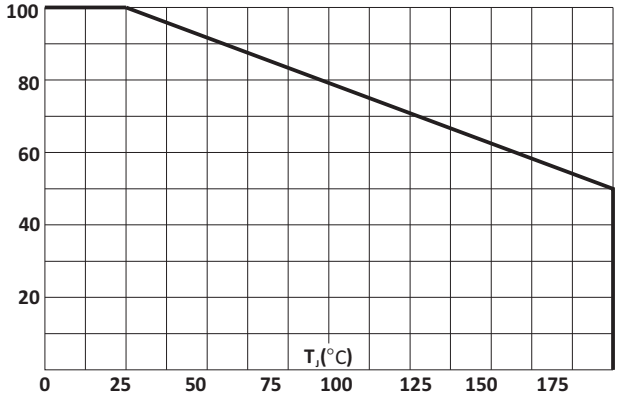
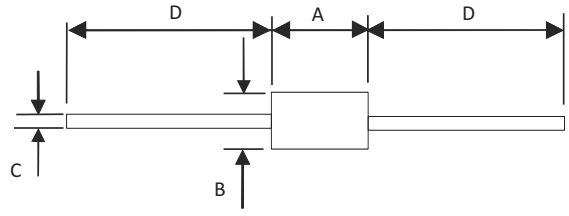


FIG.4:Pulse derating curve P_{PP} derating in percentage(%)



DIMENSIONS



Dimension	Inches		Millimeters	
	Min	Max	Min	Max
A	0. 340	0. 370	8.636	9.398
B	0. 340	0. 360	8.636	9.144
C	0. 048	0. 056	1.220	1.420
D	1.000		25.40	

ORDERING INFORMATION

Part Number	Component Package	BASE QUANTITY	PACKING OPTION
20KPAxx(C)A	P600	300PCS/BOX	AMMO
20KPAxx(C)A	P600	800PCS/REEL	Tape&Reel

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