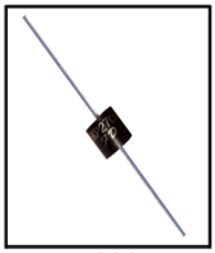
飞仕龙达 FEISHILONGDA

TVS 瞬变电压抑制二极管 Transient Voltage Suppressor [30KPA Series]

特性/机械性能： FEATURES/MECHANICAL DATE


P-600

- ◆ 30000W 峰值脉冲功率 30000W peak pulse power capability
- ◆ 优良的箝制能力 Excellent clamping capability
- ◆ 较小的箝位因子 Smaller clamping factor
- ◆ 快速响应时间：从: 0 v到 VBR，单向型小于1.0ps，双向型小于5.0ns
  Fast response time: typically less than 1.0ps from 0v to VBR for unidirectional and 5.0ns for bidirectional types.
- ◆ 耐焊接热：250℃/10S，引出端0.495”（12.5mm）处
  Resistance to soldering heat:250 ℃ /10S,terminal 0.495”（12.5mm）.
- ◆ 封 装: 模塑封装 Case: Molded plastic
- ◆ 塑封材料: 用UL94V-0认可的阻燃环氧料 Epoxy: UL94V-0 rate flame retardant
- ◆ 引 线：电镀轴式引线可焊性符合MIL-STD-202,方法208
  Lead: Axial lead solderable per MIL-STD-202, method 208
- ◆ 极 性: 色带表示阴极， Polarity: Color band denotes cathode except Bipolar
- ◆ 安装位置: 任意 Mounting position: Any

最大额定值及电气特性： MAXIMUM RATINGS AND CHARACTERISTICS

测量环境温度为25℃，除非另有规定。
Rating at 25℃ ambient temperature unless otherwise specified.

参 数 名 称 Papt Number	符号Symbol	额 定 值 Value	单位Unit
最大峰值脉冲功率 Peak power dissipation	Pppm	最小（Min） 30000	W
最大峰值反向脉冲电流 (注释1) Peak pulse reverse current (Note1)	Ippm	见表（See Table）	A
稳态功率 (注释2) Steady state power dissipation (Note2)	Pm(AV)	8.0	W
最大峰值正向浪涌电流(注释3) 仅对单向型 Maximum Peak Forward surge Current (Note3)For unidirectional only	IFSM	400.0	A
工作及储存温度 Operating and Storage Temperature Range	TJ,TSTG	-55～+175	℃

注 释: NOTES：

1. 脉冲电流时间10 / 1000μs。10 / 1000μs waveform non-repetitive current pulse
2. T1=75℃，在引线12.5mm处。T1=75℃,lead lengths 0.495inches.
3. 使用单相正弦半波，时间10ms；或使用等效的方波，4周波/分。
   Measured on 10ms single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum.

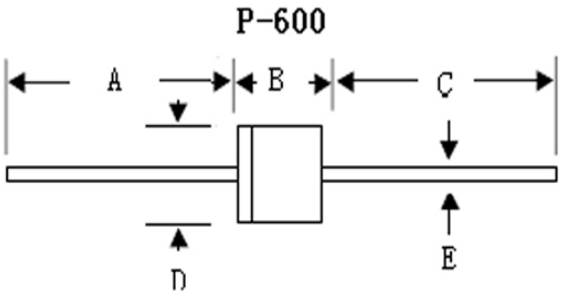
双向型器件应用说明:DEVICES FOR BIDIRECTIONAL APPLICATIONS :

1.在型号名称后注有C 或CA ，表示双向型。For bidirectional use C or CA suffix for types

2.电气特性适用于两个方向。 Electrical characteristics apply in both directions.

[30KPA Series] Transient Voltage Suppressor 瞬变电压抑制二极管 TVS

产品外形尺寸： PRODUCT APPEARANCE SIZE



DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	1.0		25.4	
B	0.340	0.360	8.6	9.1
C	1.0		25.4	
D	0.340	0.360	8.6	9.1
E	0.0480	0.0520	1.2	1.3

电特性： ELECTRICAL CHARACTERISTICS

型 号 Device Type	击穿电压 Breakdown Voltage(Note1)		测试电流 Test Current	变位电压 Stand-off Volage	最大反向漏电流 @V_{WM} MaximumReverse leadage @V_{WM}	最大峰值脉冲浪涌电流 Maximum Peak Pulse Reverse Current	最大箝位电压 @Ippm Maximum Clamping Voltage @I ppm
	$V_{(BR)}$(V) MIN	$V_{(BR)}$(V) MAX	I_T(mA)	V_{WM}(V)	I_D(μA) (Note2)	I ppm (A)	V_C (V)
30KPA28A	31.28	34.24	50	28	5000	606.0	50.0
30KPA30A	33.51	36.69	50	30	5000	548.9	55.2
30KPA33A	36.9	40.4	50	33	5000	517.9	58.5
30KPA36A	40.2	44.0	50	36	5000	490.3	61.8
30KPA39A	43.6	47.7	20	39	2000	450.9	67.2
30KPA42A	46.9	51.4	10	42	1000	420.8	72.0
30KPA43A	48.0	52.6	10	43	1000	415.1	73.0
30KPA45A	50.3	55.0	5	45	250	391.5	77.4
30KPA48A	53.6	58.7	5	48	150	371.3	81.6
30KPA51A	57.0	62.4	5	51	50	350.7	86.4
30KPA54A	60.3	66.0	5	54	20	331.5	91.4
30KPA58A	64.8	70.9	5	58	20	327.9	92.4
30KPA60A	67.0	73.4	5	60	15	297.1	102.0
30KPA64A	71.5	78.3	5	64	10	291.3	104.0
30KPA66A	73.7	80.7	5	66	10	283.2	107.0
30KPA70A	78.2	85.6	5	70	10	278.0	109.0
30KPA71A	79.3	86.8	5	71	10	271.7	111.5
30KPA72A	80.4	88.1	5	72	10	265.8	114.0
30KPA75A	83.8	91.7	5	75	10	253.8	119.4
30KPA78A	87.1	95.4	5	78	10	234.9	129.0
30KPA84A	93.8	102.7	5	84	10	217.7	139.2
30KPA90A	100.5	110.1	5	90	10	207.0	146.4
30KPA96A	107.2	117.4	5	96	10	194.2	156.0
30KPA102A	113.9	124.7	5	102	10	183.0	165.6
30KPA108A	120.6	132.1	5	108	10	172.9	175.2
30KPA120A	134.0	146.8	5	120	10	155.9	194.4
30KPA132A	147.4	161.4	5	132	10	142.3	213.0
30KPA144A	160.8	176.1	5	144	10	135.8	223.2

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	$V_{(BR)}$(V) MIN	$V_{(BR)}$(V) MAX	I_T(mA)	V_{WM}(V)	I_D(μA) (Note2)	I ppm (A)	V_C (V)
30KPA150A	167.6	183.5	5	150	10	129.8	233.4
30KPA156A	174.3	190.8	5	156	10	123.7	245.0
30KPA160A	178.7	195.7	5	160	10	120.0	252.6
30KPA168A	187.7	205.5	5	168	10	111.2	272.4
30KPA170A	189.9	207.9	5	170	10	110.2	275.0
30KPA180A	201.1	220.1	5	180	10	104.3	290.4
30KPA198A	221.2	242.2	5	198	10	94.7	319.8
30KPA216A	241.3	264.2	5	216	10	86.9	348.6
30KPA240A	268.1	293.5	5	240	10	78.3	387.0
30KPA258A	288.2	315.5	5	258	10	72.8	416.4
30KPA260A	290.4	318.0	5	260	10	72.8	416.0
30KPA270A	301.6	330.2	5	270	10	69.5	436.2
30KPA280A	312.8	342.4	5	280	10	65.3	464.0
30KPA288A	321.7	352.2	5	288	10	64.5	469.9

注 释： Notes ：

1.V（BR）值在施加IT 300μs后测量, IT 为方波或等效的脉冲波形。

2.对于双向型，V_{RWM}在60V以下，ID值加倍。

3.无后缀A表示V（BR）±10%。

1. V（BR）measured after IT applied for 300μs, IT = square pulse or equivalent
2. For bidirectional types having V_{RWM} of 60 volts , the ID limit is doubled.
3. For parts without A , the V（BR）is±10%

特性曲线图： RATINGS AND CHARACTERISTIC CURVES

FIGURE 1
PEAK PULSE POWER VS PULSE TIME

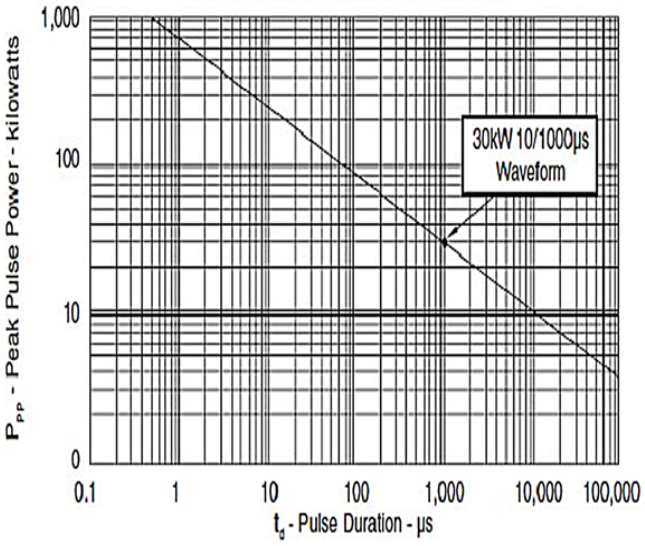

FIGURE 2
PULSE WAVE FORM

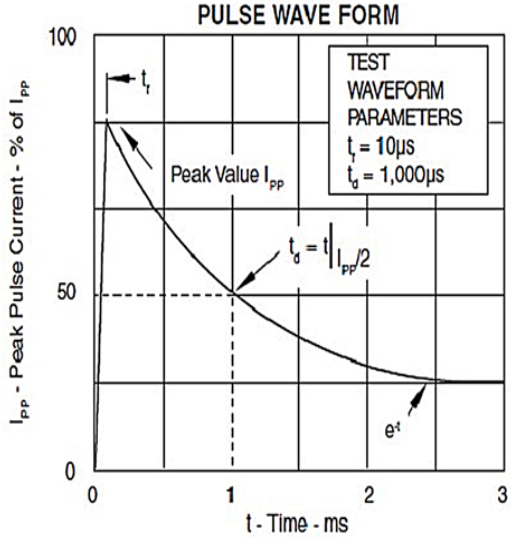

FIGURE 3
POWER DERATING CURVE