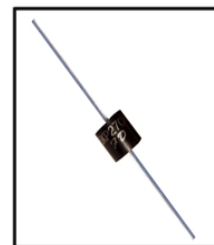


特性/机械性能:
FEATURES/MECHANICAL DATA

- ◆ 3000W 峰值脉冲功率 3000W 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: 0v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 °C /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



P-600

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) 3000	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)	7.0	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	300.0	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, 安装面积为 (40×40×1mm) 的散热铜片。

T1=75℃, lead lengths 0.495inches, Mounted on copper pad area of (40×40×1mm)

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.

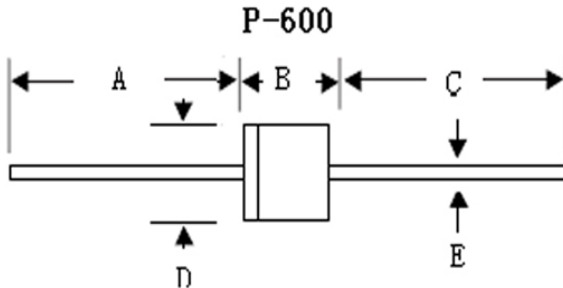
双向型器件应用说明: DEVICES FOR BIDIRECTIONAL APPLICATIONS :

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.

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 Voltage	最大反向漏电流 @V _{WM} Maximum Reverse leakage @V _{WM}	最大峰值脉冲 浪涌电流 Maximum Peak Pulse Reverse Current	最大箝位电压 @I _{ppm} 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)
3KP5.0A	6.40	7.00	50	5.0	5000	326.1	9.2
3KP6.0A	6.67	7.37	50	6.0	5000	291.3	10.3
3KP6.5A	7.22	7.98	50	6.5	2000	267.9	11.2
3KP7.0A	7.78	8.60	50	7.0	1000	250.0	12.0
3KP7.5A	8.33	9.21	5	7.5	250	232.6	12.9
3KP8.0A	8.89	9.83	5	8.0	150	220.6	13.6
3KP8.5A	9.44	10.40	5	8.5	50	208.3	14.4
3KP9.0A	10.00	11.10	5	9.0	20	194.8	15.4
3KP10A	11.10	12.30	5	10.0	15	176.5	17.0
3KP11A	12.20	13.50	5	11.0	10	164.8	18.2
3KP12A	13.30	14.70	5	12.0	10	150.8	19.9
3KP13A	14.40	15.90	5	13.0	10	139.5	21.5
3KP14A	15.60	17.20	5	14.0	10	129.3	23.2
3KP15A	16.70	18.50	5	15.0	10	123.0	24.4
3KP16A	17.80	19.70	5	16.0	10	115.4	26.0
3KP17A	18.90	20.90	5	17.0	10	108.7	27.6
3KP18A	20.00	22.10	5	18.0	10	102.7	29.2
3KP20A	22.20	24.50	5	20.0	10	92.6	32.4
3KP22A	24.40	26.90	5	22.0	10	84.5	35.5
3KP24A	26.70	29.50	5	24.0	10	77.1	38.9
3KP26A	28.90	31.90	5	26.0	10	71.3	42.1
3KP28A	31.10	34.40	5	28.0	10	66.1	45.4
3KP30A	33.30	36.80	5	30.0	10	62.0	48.4
3KP33A	36.70	40.60	5	33.0	10	56.3	53.3
3KP36A	40.00	44.20	5	36.0	10	51.6	58.1
3KP40A	44.40	49.10	5	40.0	10	46.5	64.5
3KP43A	47.80	52.80	5	43.0	10	43.2	69.4
3KP45A	50.00	55.30	5	45.0	10	41.3	72.7

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} Maximum Reverse leadage @V _{WM}	最大峰值脉冲 浪涌电流 Maximum Peak Pulse Reverse Current	最大箝位电压 @I _{ppm} 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)
3KP48A	53.30	58.90	5	48.0	10	38.8	77.4
3KP51A	56.70	62.70	5	51.0	10	36.4	82.4
3KP54A	60.00	66.30	5	54.0	10	34.4	87.1
3KP58A	64.40	71.20	5	58.0	10	32.1	93.6
3KP60A	66.70	73.70	5	60.0	10	31.0	96.8
3KP64A	71.10	78.60	5	64.0	10	29.1	103.0
3KP70A	77.80	86.00	5	70.0	10	26.5	113.0
3KP75A	83.30	92.10	5	75.0	10	24.8	121.0
3KP78A	86.70	95.80	5	78.0	10	23.8	126.0
3KP85A	94.40	104.00	5	85.0	10	21.9	137.0
3KP90A	100.00	111.00	5	90.0	10	20.5	146.0
3KP100A	111.00	123.00	5	100.0	10	18.5	162.0
3KP110A	122.00	135.00	5	110.0	10	16.9	177.0
3KP120A	133.00	147.00	5	120.0	10	15.5	193.0
3KP130A	144.00	159.00	5	130.0	10	14.4	209.0
3KP150A	167.00	185.00	5	150.0	10	12.3	243.0
3KP160A	178.00	197.00	5	160.0	10	11.6	259.0
3KP170A	189.00	209.00	5	170.0	10	10.9	275.0
3KP180A	200.00	221.00	5	180.0	10	10.4	289.0
3KP190A	211.00	233.00	5	190.0	10	9.7	310.0
3KP200A	222.00	246.00	5	200.0	10	9.1	329.2
3KP210A	233.00	258.00	5	210.0	10	8.6	349.5
3KP220A	244.00	270.00	5	220.0	10	8.1	371.1

注 释: Notes :

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

2.对于双向型, V_{RWM}在10V及10V以下, I_D值加倍。

3.无后缀A表示V (BR) ±10%。

1. V (BR) measured after I_T applied for 300μs, I_T = square pulse or equivalent

2. For bidirectional types having V_{RWM} of 10 volts and less, the I_D limit is doubled.

3. For parts without A , the V (BR) is±10%

电特性:

ELECTRICAL CHARACTERISTICS

Fig. 1 - Peak Pulse Power Rating Curve

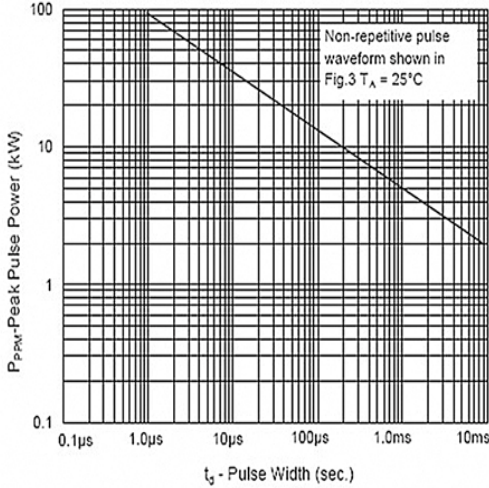


Fig.2 - Pulse Derating Curve

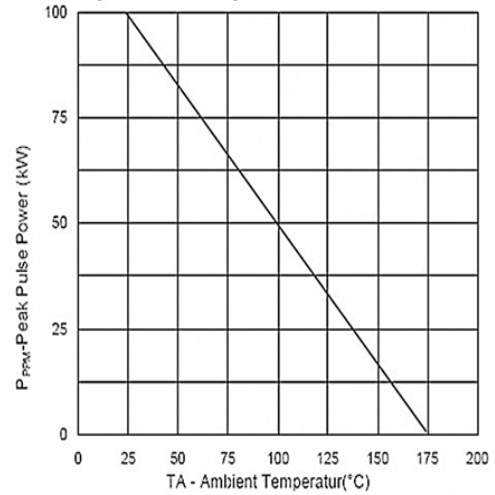


Fig.3 - Pulse Waveform

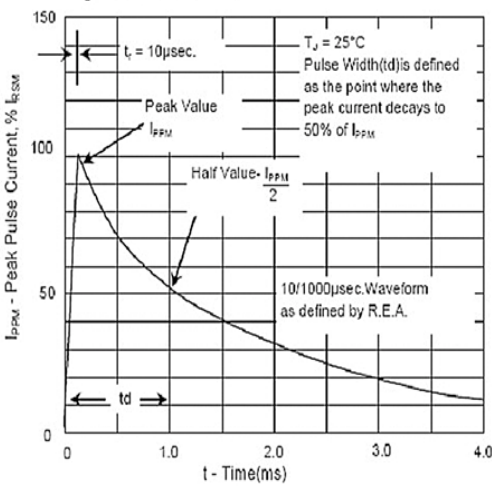


Fig. 4 - Typical Junction Capacitance

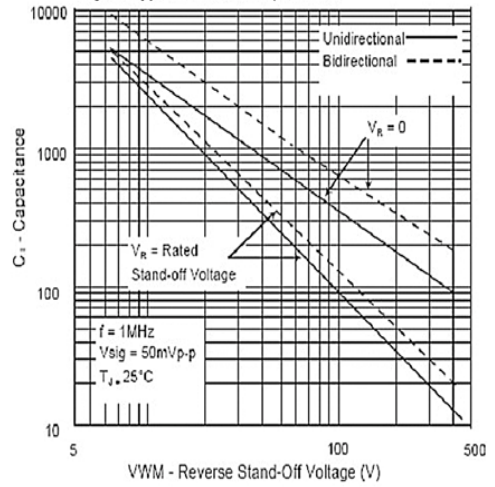


Fig. 5 - Steady State Power Derating Curve

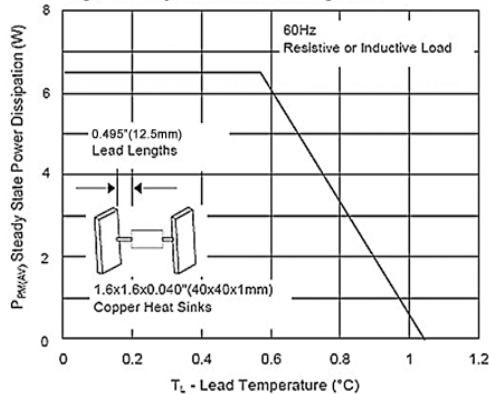


Fig.6 - Maximum Non-repetitive Forward Surge

