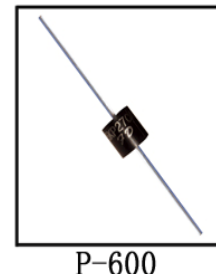


特性/机械性能:
FEATURES/MECHANICAL DATA

- ◆ 5000W 峰值脉冲功率 5000W 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


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) 5000	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
最大瞬态正向电压 @100A 仅对单向型 (注释4) Maximum instantaneous forward voltage @100A , For unidirectional only (Note4)	VF	3.5	V
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 0.495 inches.
3. 使用单相正弦半波, 时间10ms; 或使用等效的方波, 4周波/分。

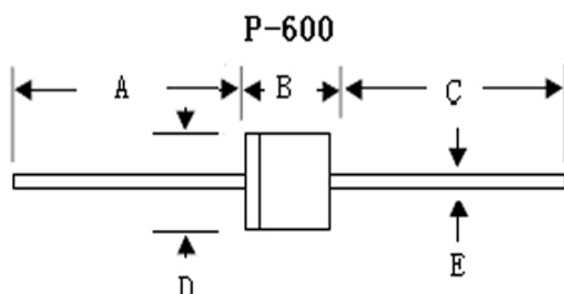
Measured on 10ms single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum.

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)
5KP5.0	6.40	7.30	50	5.0	5000.0	546	9.6
5KP5.0A	6.40	7.00	50	5.5	5000.0	570	9.2
5KP6.0	6.67	8.15	50	6.0	5000.0	460	11.4
5KP6.0A	6.67	7.37	50	6.0	5000.0	509	10.3
5KP6.5	7.22	8.82	50	6.5	2000.0	426	12.3
5KP6.5A	7.22	7.98	50	6.5	2000.0	447	11.2
5KP7.0	7.78	9.51	50	7.0	1000.0	394	13.3
5KP7.0A	7.78	8.60	50	7.0	1000.0	337	12.0
5KP7.5	8.33	10.2	5.0	7.5	250.0	367	14.3
5KP7.5A	8.33	9.21	5.0	7.5	250.0	406	12.9
5KP8.0	8.89	10.9	5.0	8.0	150.0	350	15.0
5KP8.0A	8.89	9.83	5.0	8.0	150.0	386	13.6
5KP8.5	9.44	11.5	5.0	8.5	50.0	330	15.9
5KP8.5A	9.44	10.4	5.0	8.5	50.0	364	14.4
5KP9.0	10.0	12.2	5.0	9.0	20.0	310	16.9
5KP9.0A	10.0	11.1	5.0	9.0	20.0	340	15.4
5KP10	11.1	13.6	5.0	10.0	15.0	279	18.8
5KP10A	11.1	12.3	5.0	10.0	15.0	308	17.0
5KP11	12.2	14.9	5.0	11.0	10.0	261	20.1
5KP11A	12.2	13.5	5.0	11.0	10.0	288	18.2
5KP12	13.3	16.3	5.0	12.0	10.0	238	22.0
5KP12A	13.3	14.7	5.0	12.0	10.0	263	19.9
5KP13	14.4	17.6	5.0	13.0	10.0	220	23.8
5KP13A	14.4	15.9	5.0	13.0	10.0	244	21.5
5KP14	15.6	19.1	5.0	14.0	10.0	203	25.8
5KP14A	15.6	17.2	5.0	14.0	10.0	226	23.2
5KP15	16.7	20.4	5.0	15.0	10.0	195	26.9
5KP15A	16.7	18.5	5.0	15.0	10.0	215	24.4

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)
5KP16	17.8	21.8	5.0	16.0	10.0	182	28.8
5KP16A	17.8	19.7	5.0	16.0	10.0	201	26.0
5KP17	18.9	23.1	5.0	17.0	10.0	172	30.5
5KP17A	18.9	20.9	5.0	17.0	10.0	181	27.6
5KP18	20.0	24.4	5.0	18.0	10.0	163	32.2
5KP18A	20.0	22.1	5.0	18.0	10.0	179	29.2
5KP20	22.2	27.1	5.0	20.0	10.0	146	35.8
5KP20A	22.2	24.5	5.0	20.0	10.0	162	32.4
5KP22	24.4	29.8	5.0	22.0	10.0	133	39.4
5KP22A	24.4	26.9	5.0	22.0	10.0	147	35.5
5KP24	26.7	32.6	5.0	24.0	10.0	122	43.0
5KP24A	26.7	29.5	5.0	24.0	10.0	134	38.9
5KP26	28.9	35.3	5.0	26.0	10.0	112	46.6
5KP26A	28.9	31.9	5.0	26.0	10.0	124	42.1
5KP28	31.1	38.0	5.0	28.0	10.0	104	50.1
5KP28A	31.1	34.4	5.0	28.0	10.0	115	45.4
5KP30	33.3	40.7	5.0	30.0	10.0	98.0	53.5
5KP30A	33.3	36.8	5.0	30.0	10.0	108	48.4
5KP33	36.7	44.9	5.0	33.0	10.0	88	59.0
5KP33A	36.7	40.6	5.0	33.0	10.0	98.0	53.3
5KP36	40.0	48.9	5.0	36.0	10.0	81.0	64.3
5KP36A	40.0	44.2	5.0	36.0	10.0	90.0	58.1
5KP40	44.4	54.3	5.0	40.0	10.0	73.0	71.4
5KP40A	44.4	49.1	5.0	40.0	10.0	81.0	64.5
5KP43	47.8	58.4	5.0	43.0	10.0	68.0	76.7
5KP43A	47.8	52.8	5.0	43.0	10.0	75.0	69.4
5KP45	50.0	61.1	5.0	45.0	10.0	65.0	80.3
5KP45A	50.0	55.3	5.0	45.0	10.0	72.0	72.7
5KP48	53.3	65.2	5.0	48.0	10.0	61.0	85.5
5KP48A	53.3	58.9	5.0	48.0	10.0	67.0	77.4
5KP51	56.7	69.3	5.0	51.0	10.0	57.0	91.1
5KP51A	56.7	62.7	5.0	51.0	10.0	63.0	82.4
5KP54	60.0	73.3	5.0	54.0	10.0	54.0	96.3
5KP54A	60.0	66.3	5.0	54.0	10.0	60.0	87.1
5KP58	64.4	78.7	5.0	58.0	10.0	50.0	103
5KP58A	64.4	71.2	5.0	58.0	10.0	55.0	94
5KP60	66.7	81.5	5.0	60.0	10.0	49.0	107
5KP60A	66.7	73.7	5.0	60.0	10.0	54.0	97

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	IT(mA)	V _{WM} (V)	ID(μA) (Note2)	I _{ppm} (A)	V _C (V)
5KP64	71.1	96.9	5.0	64.0	10.0	46.0	114
5KP64A	71.1	78.6	5.0	64.0	10.0	50.0	103
5KP70	77.6	95.1	5.0	70.0	10.0	42.0	125
5KP70A	77.6	86.0	5.0	70.0	10.0	46.0	113
5KP75	83.3	102	5.0	75.0	10.0	39.0	134
5KP75A	83.3	92.1	5.0	75.0	10.0	43.0	121
5KP78	86.7	106.0	5.0	78.0	10.0	37.0	139
5KP78A	86.7	95.8	5.0	78.0	10.0	41.0	126
5KP85	94.4	115	5.0	85.0	10.0	34.0	151
5KP85A	94.4	104	5.0	85.0	10.0	38.0	137
5KP90	100	122	5.0	90.0	10.0	32.0	160
5KP90A	100	111	5.0	90.0	10.0	35.0	146
5KP100	111	136	5.0	100	10.0	29.0	179
5KP100A	111	123	5.0	100	10.0	32.0	162
5KP110	122	149	5.0	110	10.0	26.0	196
5KP110A	122	135	5.0	110	10.0	29.0	177
5KP120A	133	147	5.0	120	10.0	26.0	193
5KP130A	144	159	5.0	130	10.0	24.0	209
5KP150A	167	185	5.0	150	10.0	21.0	243
5KP150A	178	197	5.0	160	10.0	19.0	259
5KP170A	189	209	5.0	170	10.0	18.0	275
5KP180A	200	221	5.0	180	10.0	17.0	292
5KP190A	211	233	5.0	190	10.0	16.0	310
5KP200A	222	246	5.0	200	10.0	15.0	329
5KP210A	233	258	5.0	210	10.0	14.0	349
5KP220A	244	270	5.0	220	10.0	13.0	371
5KP250A	277	306	5.0	250	10.0	12.0	425

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, VRWM在10V及10V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 VRWM of 10 volts and less, the ID limit is doubled.

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

特性曲线图:

RATINGS AND CHARACTERISTIC CURVES

FIG. 1 - PEAK PULSE POWER RATING CURVE

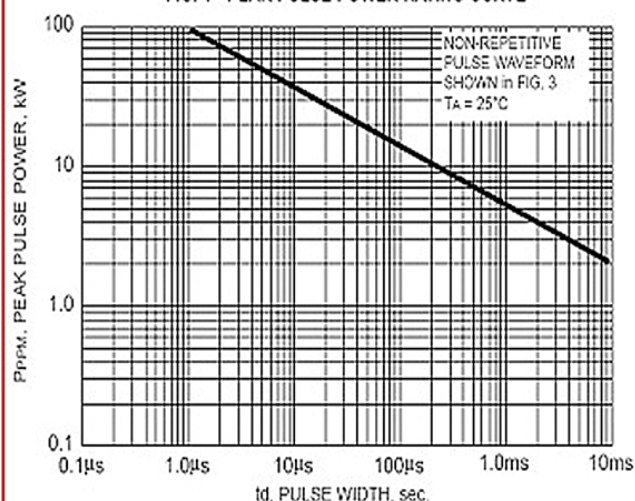


FIG. 3 - PULSE WAVEFORM

FIG. 2 - PULSE DERATING CURVE

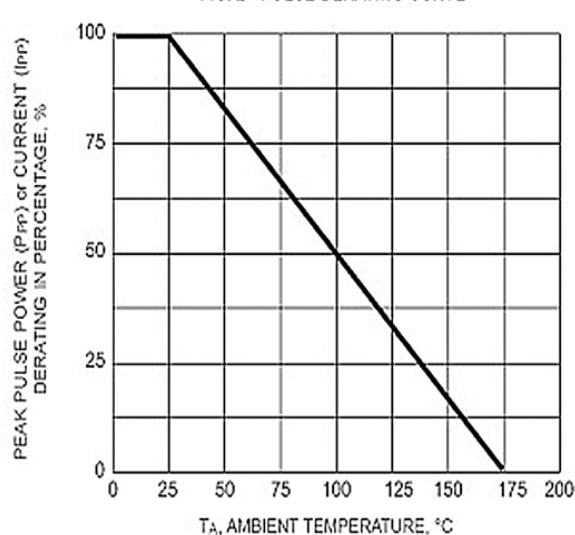


FIG. 3 - PULSE WAVEFORM

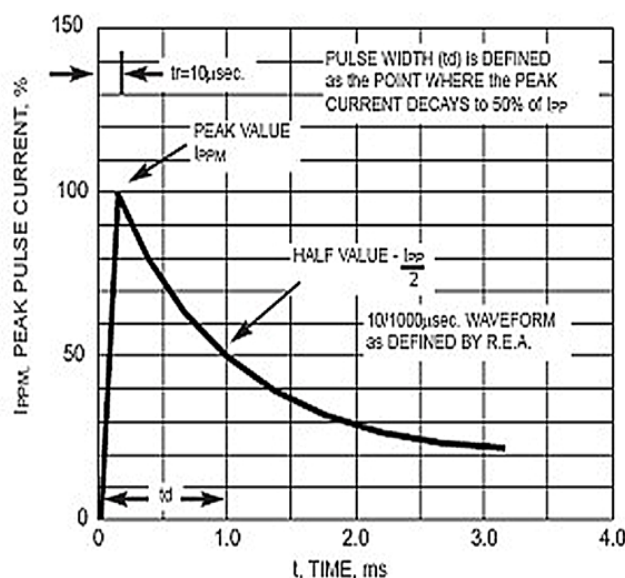
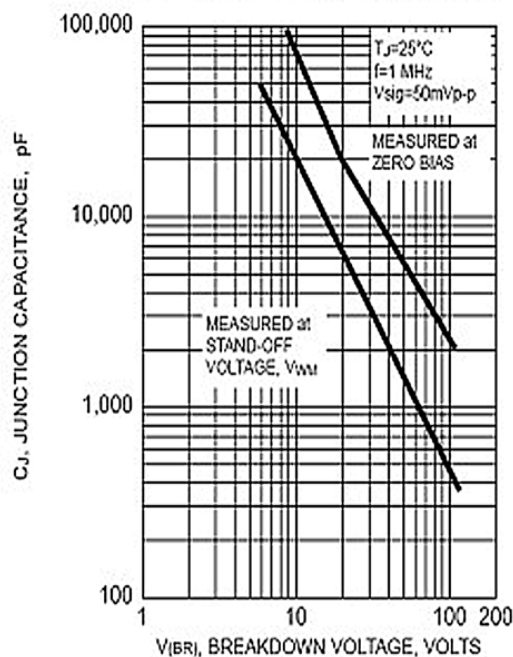


FIG. 4 - TYPICAL JUNCTION CAPACITANCE



特性曲线图:

RATINGS AND CHARACTERISTIC CURVES

FIG. 5 - STEADY STATE POWER DERATING CURVE

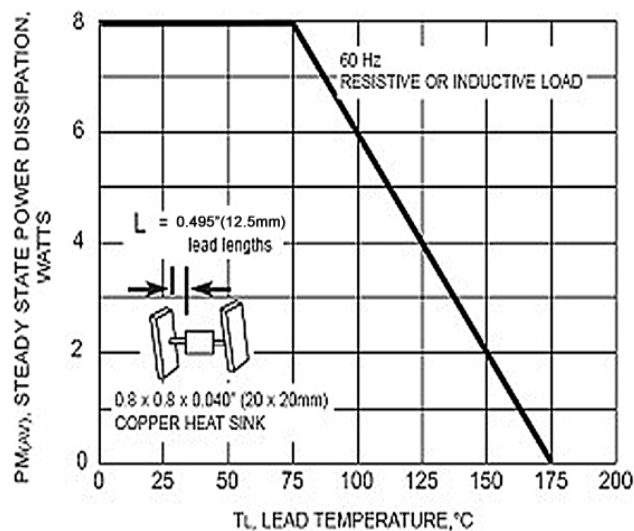


FIG. 6 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

