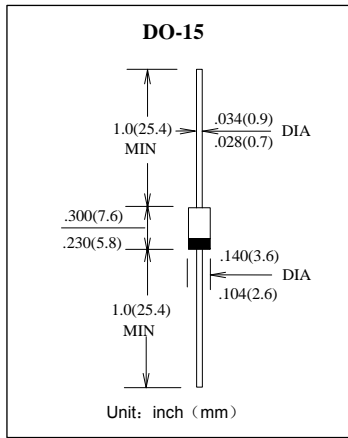


## 瞬间电压抑制二极管 转折电压 6.8 --- 440V

## Transient Voltage Suppressors Breakdown Voltage 6.8 to 440V



### 特征 Features

- 塑料封装 Plastic package
- 极好的钳位能力 Excellent clamping capability
- 高温焊接保证 High temperature soldering guaranteed:  
265°C/10 秒, 0.375" (9.5mm) 引线长度。  
265°C/10 seconds, 0.375" (9.5mm) lead length,
- 引线可承受5 磅 (2.3kg) 拉力。 5 lbs. (2.3kg) tension
- 引线和管体皆符合RoHS标准。  
Lead and body according with RoHS standard

### 机械数据 Mechanical Data

- 端子: 镀锡轴向引线 Terminals: Plated axial leads
- 极性: 色环端为负极 Polarity: Color band denotes cathode end
- 安装位置: 任意 Mounting Position: Any

极限值和温度特性 TA = 25°C 除非另有规定。

Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

参数 Parameter	符号 Symbols	数值 Value	单位 Unit
功率消耗 Power Dissipation	$P_{ppm}$	Minimum 600	W
最大瞬间正向电压 Maximum Instantaneous Forward Voltage $I_F = 50A$	$V_F$	3.5	V
典型热阻 Typical Thermal Resistance Junction-to-lead	$R_{\theta JA}$	20	°C/W
峰值正向浪涌电流 8.3ms单一正弦半波 Peak forward surge current 8.3 ms single half sine-wave	$I_{FSM}$	100	A
工作结温和存储温度 Operating Junction And Storage Temperature Range	$T_J, T_{STG}$	-55 --- +175	°C

电特性 TA = 25°C 除非另有规定。

Electrical Characteristics Ratings at 25°C ambient temperature

型号 Type	转折电压 Breakdown Voltage $V(BR) (V)$		测试电流 Test Current	反向峰值电压 Peak Reverse Voltage	最大反向 漏电流 Maximum Reverse Leakage	最大峰值 脉冲电流 Maximum Peak Pulse Current	最大钳位电压 Maximum Clamping Voltage	最大温度系数 Maximum Temperature Coefficient
	最小值Min.	最大值Max	$I_T$ (mA)	$V_{WM}$ (V)	$I_D$ ( $\mu A$ )	$I_{PPM}$ (A)	$V_C$ (V)	% / °C
P6KE 6.8	6.12	7.48	10	5.50	1000	55.6	10.8	0.057
P6KE 6.8A	6.45	7.14	10	5.80	1000	57.1	10.5	0.057
P6KE 7.5	6.75	8.25	10	6.05	500	51.3	11.7	0.061
P6KE 7.5A	7.13	7.88	10	6.40	500	53.1	11.3	0.061
P6KE 8.2	7.38	9.02	10	6.63	200	48.0	12.5	0.065
P6KE 8.2A	7.79	8.61	10	7.02	200	49.6	12.1	0.065
P6KE 9.1	8.19	10.0	1.0	7.37	50	43.5	13.8	0.068
P6KE 9.1A	8.65	9.55	1.0	7.78	50	44.8	13.4	0.068
P6KE 10	9.00	11.0	1.0	8.10	10	40.0	15.0	0.073
P6KE 10A	9.50	10.5	1.0	8.55	10	41.4	14.5	0.073
P6KE 11	9.90	12.1	1.0	8.92	5.0	37.0	16.2	0.075
P6KE 11A	10.5	11.6	1.0	9.40	5.0	38.5	15.6	0.075

型号 Type	转折电压 Breakdown Voltage V(BR) (V)		测试电流 Test Current	反向峰值电压 Peak Reverse Voltage	最大反向 漏电流 Maximum Reverse Leakage	最大峰值 脉冲电流 Maximum Peak Pulse Current	最大钳位电压 Maximum Clamping Voltage	最大温度系数 Maximum Temperature Coefficient
	最小值Min.	最大值Max	I <sub>T</sub> (mA)	V <sub>WM</sub> (V)	I <sub>D</sub> (μA)	I <sub>PPM</sub> (A)	V <sub>C</sub> (V)	% / °C
P6KE 12	10.8	13.2	1.0	9.72	5.0	34.7	17.3	0.076
P6KE 12A	11.4	12.6	1.0	10.2	5.0	35.9	16.7	0.078
P6KE 13	11.7	14.3	1.0	10.5	5.0	31.6	19.0	0.081
P6KE 13A	12.4	13.7	1.0	11.1	5.0	33.0	18.2	0.081
P6KE 15	13.5	16.5	1.0	12.1	1.0	27.3	22.0	0.084
P6KE 15A	14.3	15.8	1.0	12.8	1.0	28.3	21.2	0.084
P6KE 16	14.4	17.6	1.0	12.9	1.0	25.5	23.5	0.086
P6KE 16A	15.2	16.8	1.0	13.6	1.0	26.7	22.5	0.086
P6KE 18	16.2	19.8	1.0	14.5	1.0	22.6	26.5	0.088
P6KE 18A	17.1	18.9	1.0	15.3	1.0	23.8	25.2	0.088
P6KE 20	18.0	22.0	1.0	16.2	1.0	20.6	29.1	0.090
P6KE 20A	19.0	21.0	1.0	17.1	1.0	21.7	27.7	0.090
P6KE 22	19.8	24.2	1.0	17.8	1.0	18.8	31.9	0.092
P6KE 22A	20.9	23.1	1.0	18.8	1.0	19.6	30.6	0.092
P6KE 24	21.6	26.4	1.0	19.4	1.0	17.3	34.7	0.094
P6KE 24A	22.8	25.2	1.0	20.5	1.0	18.1	33.2	0.094
P6KE 27	24.3	29.7	1.0	21.8	1.0	15.3	39.1	0.096
P6KE 27A	25.7	28.4	1.0	23.1	1.0	16.0	37.55	0.096
P6KE 30	27.0	33.0	1.0	24.3	1.0	13.8	43.5	0.097
P6KE 30A	28.5	31.5	1.0	25.6	1.0	14.5	41.4	0.097
P6KE 33	29.7	36.3	1.0	26.8	1.0	12.6	47.7	0.098
P6KE 33A	31.4	34.7	1.0	28.2	1.0	13.1	45.7	0.098
P6KE 36	32.4	39.6	1.0	29.1	1.0	11.5	52.0	0.099
P6KE 36A	34.2	37.8	1.0	30.8	1.0	12.0	49.9	0.099
P6KE 39	35.1	42.9	1.0	31.6	1.0	10.6	56.4	0.100
P6KE 39A	37.1	41.0	1.0	33.3	1.0	11.1	53.9	0.100
P6KE 43	38.7	47.3	1.0	34.8	1.0	9.7	61.9	0.101
P6KE 43A	40.9	45.2	1.0	36.8	1.0	10.1	59.3	0.101
P6KE 47	42.3	51.7	1.0	38.1	1.0	8.8	67.8	0.101
P6KE 47A	44.7	49.4	1.0	40.2	1.0	9.3	64.8	0.101
P6KE 51	45.9	56.1	1.0	41.3	1.0	8.2	73.5	0.102
P6KE 51A	48.5	53.6	1.0	43.6	1.0	8.6	70.1	0.102
P6KE 56	50.4	61.6	1.0	45.4	1.0	7.5	80.5	0.103
P6KE 56A	53.2	58.8	1.0	47.8	1.0	7.8	77.0	0.103
P6KE 62	55.8	68.2	1.0	50.2	1.0	6.7	89.0	0.104
P6KE 62A	58.9	65.1	1.0	53.0	1.0	7.1	85.0	0.104
P6KE 68A	61.2	74.8	1.0	55.1	1.0	6.1	98.0	0.104
P6KE 68	64.6	71.4	1.0	58.1	1.0	6.5	92.0	0.104
P6KE 75A	67.5	82.5	1.0	60.7	1.0	5.6	108	0.105
P6KE 75	71.3	78.8	1.0	64.1	1.0	5.8	103	0.105

型号 Type	转折电压 Breakdown Voltage V(BR) (V)		测试电流 Test Current	反向峰值电压 Peak Reverse Voltage	最大反向 漏电流 Maximum Reverse Leakage	最大峰值 脉冲电流 Maximum Peak Pulse Current	最大钳位电压 Maximum Clamping Voltage	最大温度系数 Maximum Temperature Coefficient
	最小值Nin.	最大值Max	I <sub>T</sub> (mA)	V <sub>WM</sub> (V)	I <sub>D</sub> (μA)	I <sub>PPM</sub> (A)	V <sub>C</sub> (V)	% / °C
P6KE 82	73.8	90.2	1.0	66.4	1.0	5.1	118	0.105
P6KE 82A	77.9	86.1	1.0	70.1	1.0	5.3	113	0.105
P6KE 91	81.9	100	1.0	73.7	1.0	4.6	131	0.106
P6KE 91A	86.5	95.5	1.0	77.8	1.0	4.8	125	0.106
P6KE 100	90.0	110	1.0	81.0	1.0	4.2	144	0.106
P6KE 100A	95.0	105	1.0	85.5	1.0	4.4	137	0.106
P6KE 110	99.0	121	1.0	89.2	1.0	3.8	158	0.107
P6KE 110A	105	116	1.0	94.0	1.0	3.9	152	0.107
P6KE 120	108	132	1.0	97.2	1.0	3.5	173	0.107
P6KE 120A	114	126	1.0	102	1.0	3.6	165	0.107
P6KE 130	117	143	1.0	105	1.0	3.2	187	0.107
P6KE 130A	124	137	1.0	111	1.0	3.4	179	0.107
P6KE 150	135	165	1.0	121	1.0	2.8	215	0.108
P6KE 150A	143	158	1.0	128	1.0	2.9	207	0.108
P6KE 160	144	176	1.0	130	1.0	2.6	230	0.108
P6KE 160A	152	168	1.0	136	1.0	2.7	219	0.108
P6KE 170	153	187	1.0	138	1.0	2.5	244	0.108
P6KE 170A	162	179	1.0	145	1.0	2.6	234	0.108
P6KE 180	162	198	1.0	146	1.0	2.3	258	0.108
P6KE 180A	171	189	1.0	154	1.0	2.4	246	0.108
P6KE 200	180	220	1.0	162	1.0	2.1	287	0.108
P6KE 200A	190	210	1.0	171	1.0	2.2	274	0.108
P6KE 220	198	242	1.0	175	1.0	1.7	344	0.108
P6KE 220A	209	231	1.0	185	1.0	1.8	328	0.108
P6KE 250	225	275	1.0	202	1.0	1.7	360	0.110
P6KE 250A	237	263	1.0	214	1.0	1.7	344	0.110
P6KE 300	270	330	1.0	243	1.0	1.4	430	0.110
P6KE 300A	285	315	1.0	256	1.0	1.4	414	0.110
P6KE 350	315	385	1.0	284	1.0	1.2	504	0.110
P6KE 350A	333	368	1.0	300	1.0	1.2	482	0.110
P6KE 400	360	440	1.0	324	1.0	1.0	574	0.110
P6KE 400A	380	420	1.0	342	1.0	1.1	548	0.110
P6KE 440	396	484	1.0	356	1.0	0.95	631	0.110
P6KE 440A	418	462	1.0	376	1.0	1.0	602	0.110

图1 峰值脉冲功率定额曲线

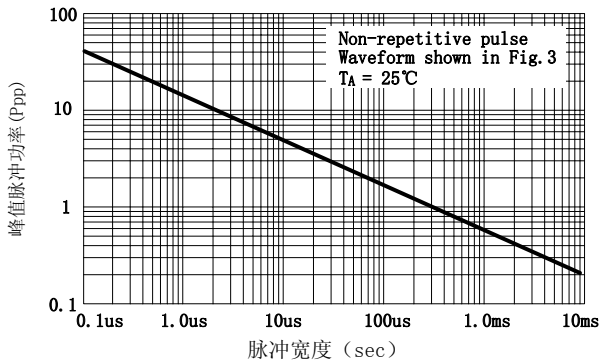


图2 脉冲降额曲线

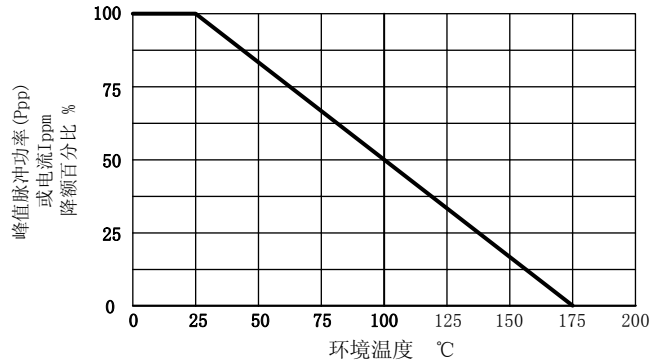


图3 脉冲波形

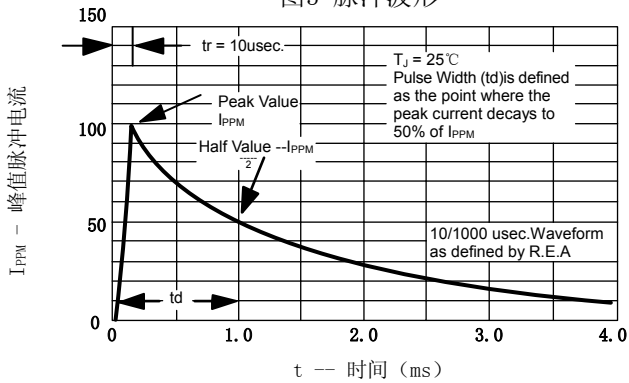


图4 单向典型结电容

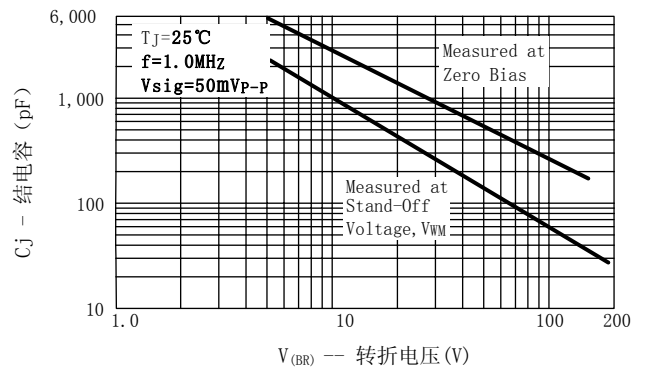


图5 稳态功率降额曲线

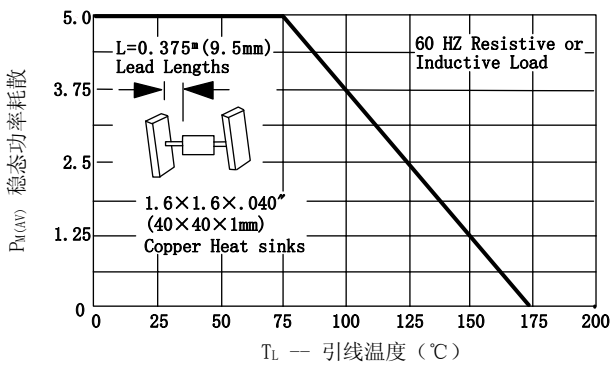


图6 最大步重复浪涌电流

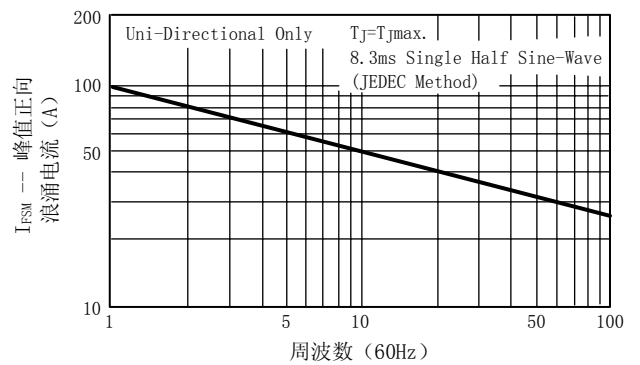


图7 典型反向泄漏特性

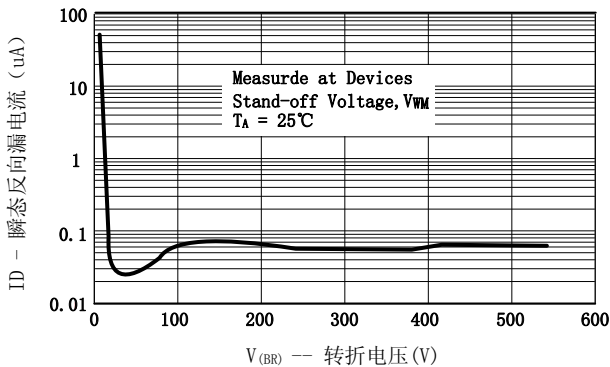


图8 典型瞬态热阻

