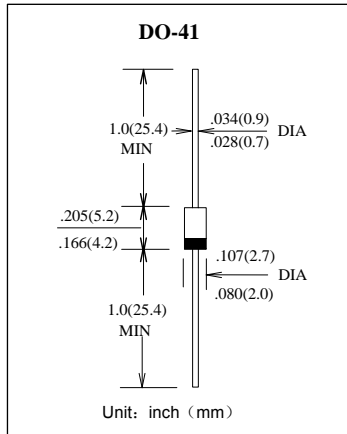


瞬间电压抑制二极管

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:
260°C/10 秒, 0.375" (9.5mm) 引线长度。
260°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 and 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 400	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	$R_{\theta JA}$	60	°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}	40	A
工作结温和存储温度 Operating Junction And Storage Temperature Range	T_j, T_{STG}	-50 --- +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 (μA)	I_{PPM} (A)	V_C (V)	% / °C
P4KE 6.8	6.12	7.48	10	5.50	1000	37.0	10.8	0.057
P4KE 6.8A	6.45	7.14	10	5.80	1000	38.1	10.5	0.057
P4KE 7.5	6.75	8.25	10	6.05	500	34.2	11.7	0.061
P4KE 7.5A	7.13	7.88	10	6.40	500	35.4	11.3	0.061
P4KE 8.2	7.38	9.02	10	6.63	200	32.0	12.5	0.065
P4KE 8.2A	7.79	8.61	10	7.02	200	33.1	12.1	0.065
P4KE 9.1	8.19	10.0	1.0	7.37	50	29.0	13.8	0.068
P4KE 9.1A	8.65	9.55	1.0	7.78	50	29.9	13.4	0.068
P4KE 10	9.00	11.0	1.0	8.10	10	26.7	15.0	0.073
P4KE 10A	9.50	10.5	1.0	8.55	10	27.6	14.5	0.073
P4KE 11	9.90	12.1	1.0	8.92	5.0	24.7	16.2	0.075
P4KE 11A	10.5	11.6	1.0	9.40	5.0	25.6	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 _T (mA)	V _{WM} (V)	I _D (μA)	I _{PPM} (A)	V _C (V)	% / °C
P4KE 12	10.8	13.2	1.0	9.72	5.0	23.1	17.3	0.076
P4KE 12A	11.4	12.6	1.0	10.2	5.0	24.0	16.7	0.078
P4KE 13	11.7	14.3	1.0	10.5	5.0	21.1	19.0	0.081
P4KE 13A	12.4	13.7	1.0	11.1	5.0	22.0	18.2	0.081
P4KE 15	13.5	16.5	1.0	12.1	1.0	18.2	22.0	0.084
P4KE 15A	14.3	15.8	1.0	12.8	1.0	18.9	21.2	0.084
P4KE 16	14.4	17.6	1.0	12.9	1.0	17.0	23.5	0.086
P4KE 16A	15.2	16.8	1.0	13.6	1.0	17.8	22.5	0.086
P4KE 18	16.2	19.8	1.0	14.5	1.0	15.1	26.5	0.088
P4KE 18A	17.1	18.9	1.0	15.3	1.0	15.9	25.2	0.088
P4KE 20	18.0	22.0	1.0	16.2	1.0	13.7	29.1	0.090
P4KE 20A	19.0	21.0	1.0	17.1	1.0	14.4	27.7	0.090
P4KE 22	19.8	24.2	1.0	17.8	1.0	12.5	31.9	0.092
P4KE 22A	20.9	23.1	1.0	18.8	1.0	13.1	30.6	0.092
P4KE 24	21.6	26.4	1.0	19.4	1.0	11.5	34.7	0.094
P4KE 24A	22.8	25.2	1.0	20.5	1.0	12.0	33.2	0.094
P4KE 27	24.3	29.7	1.0	21.8	1.0	10.2	39.1	0.096
P4KE 27A	25.7	28.4	1.0	23.1	1.0	10.7	37.55	0.096
P4KE 30	27.0	33.0	1.0	24.3	1.0	9.2	43.5	0.097
P4KE 30A	28.5	31.5	1.0	25.6	1.0	9.7	41.4	0.097
P4KE 33	29.7	36.3	1.0	26.8	1.0	8.4	47.7	0.098
P4KE 33A	31.4	34.7	1.0	28.2	1.0	8.8	45.7	0.098
P4KE 36	32.4	39.6	1.0	29.1	1.0	7.7	52.0	0.099
P4KE 36A	34.2	37.8	1.0	30.8	1.0	8.0	49.9	0.099
P4KE 39	35.1	42.9	1.0	31.6	1.0	7.1	56.4	0.100
P4KE 39A	37.1	41.0	1.0	33.3	1.0	7.4	53.9	0.100
P4KE 43	38.7	47.3	1.0	34.8	1.0	6.5	61.9	0.101
P4KE 43A	40.9	45.2	1.0	36.8	1.0	6.7	59.3	0.101
P4KE 47	42.3	51.7	1.0	38.1	1.0	5.9	67.8	0.101
P4KE 47A	44.7	49.4	1.0	40.2	1.0	6.2	64.8	0.101
P4KE 51	45.9	56.1	1.0	41.3	1.0	5.4	73.5	0.102
P4KE 51A	48.5	53.6	1.0	43.6	1.0	5.7	70.1	0.102
P4KE 56	50.4	61.6	1.0	45.4	1.0	5.0	80.5	0.103
P4KE 56A	53.2	58.8	1.0	47.8	1.0	5.2	77.0	0.103
P4KE 62	55.8	68.2	1.0	50.2	1.0	4.5	89.0	0.104
P4KE 62A	58.9	65.1	1.0	53.0	1.0	4.7	85.0	0.104
P4KE 68A	61.2	74.8	1.0	55.1	1.0	4.1	98.0	0.104
P4KE 68	64.6	71.4	1.0	58.1	1.0	4.3	92.0	0.104
P4KE 75A	67.5	82.5	1.0	60.7	1.0	3.7	108	0.105
P46KE 75	71.3	78.8	1.0	64.1	1.0	3.9	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 _T (mA)	V _{WM} (V)	I _D (μA)	I _{PPM} (A)	V _C (V)	% / °C
P4KE 82	73.8	90.2	1.0	66.4	1.0	3.4	118	0.105
P4KE 82A	77.9	86.1	1.0	70.1	1.0	3.5	113	0.105
P4KE 91	81.9	100	1.0	73.7	1.0	3.1	131	0.106
P4KE 91A	86.5	95.5	1.0	77.8	1.0	3.2	125	0.106
P4KE 100	90.0	110	1.0	81.0	1.0	2.8	144	0.106
P4KE 100A	95.0	105	1.0	85.5	1.0	2.9	137	0.106
P4KE 110	99.0	121	1.0	89.2	1.0	2.5	158	0.107
P4KE 110A	105	116	1.0	94.0	1.0	2.6	152	0.107
P4KE 120	108	132	1.0	97.2	1.0	2.3	173	0.107
P4KE 120A	114	126	1.0	102	1.0	2.4	165	0.107
P4KE 130	117	143	1.0	105	1.0	2.1	187	0.107
P4KE 130A	124	137	1.0	111	1.0	2.2	179	0.107
P4KE 150	135	165	1.0	121	1.0	1.9	215	0.108
P4KE 150A	143	158	1.0	128	1.0	1.9	207	0.108
P4KE 160	144	176	1.0	130	1.0	1.7	230	0.108
P4KE 160A	152	168	1.0	136	1.0	1.8	219	0.108
P4KE 170	153	187	1.0	138	1.0	1.6	244	0.108
P4KE 170A	162	179	1.0	145	1.0	1.7	234	0.108
P4KE 180	162	198	1.0	146	1.0	1.6	258	0.108
P4KE 180A	171	189	1.0	154	1.0	1.6	246	0.108
P4KE 200	180	220	1.0	162	1.0	1.4	287	0.108
P4KE 200A	190	210	1.0	171	1.0	1.5	274	0.108
P4KE 220	198	242	1.0	175	1.0	1.2	344	0.108
P4KE 220A	209	231	1.0	185	1.0	1.2	328	0.108
P4KE 250	225	275	1.0	202	1.0	1.1	360	0.110
P4KE 250A	237	263	1.0	214	1.0	1.2	344	0.110
P4KE 300	270	330	1.0	243	1.0	0.93	430	0.110
P4KE 300A	285	315	1.0	256	1.0	1.0	414	0.110
P4KE 350	315	385	1.0	284	1.0	0.79	504	0.110
P4KE 350A	333	368	1.0	300	1.0	0.83	482	0.110
P4KE 400	360	440	1.0	324	1.0	0.70	574	0.110
P4KE 400A	380	420	1.0	342	1.0	0.73	548	0.110
P4KE 440	396	484	1.0	356	1.0	0.63	631	0.110
P4KE 440A	418	462	1.0	376	1.0	0.66	602	0.110

图1 峰值脉冲功率定额曲线

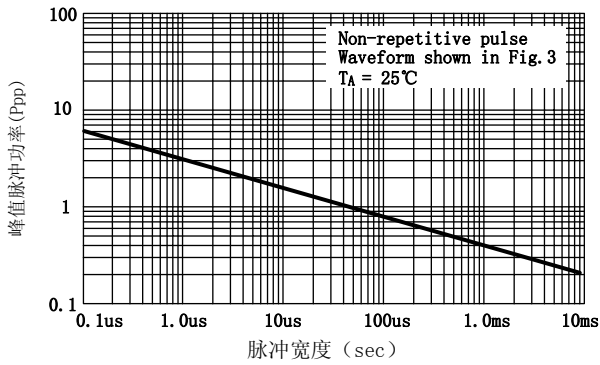


图2 脉冲降额曲线

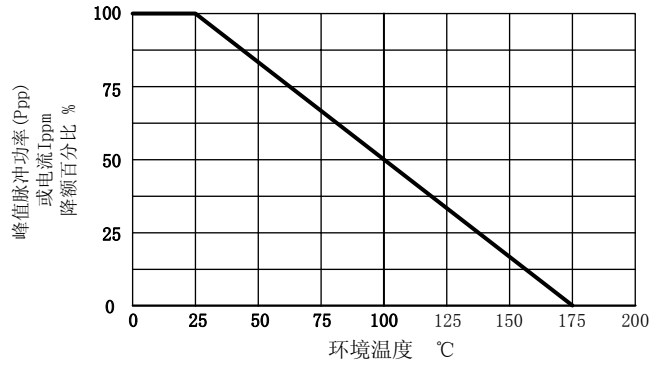


图3 脉冲波形

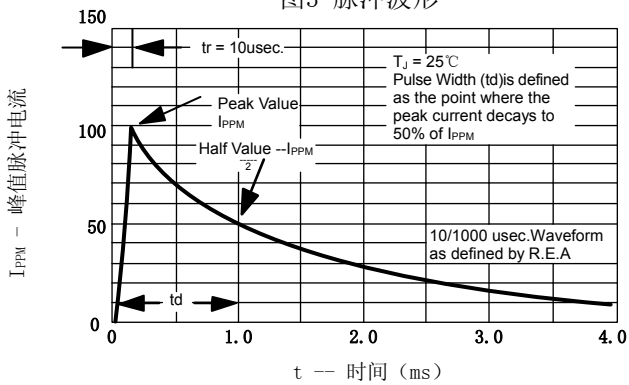


图4 单向典型结电容

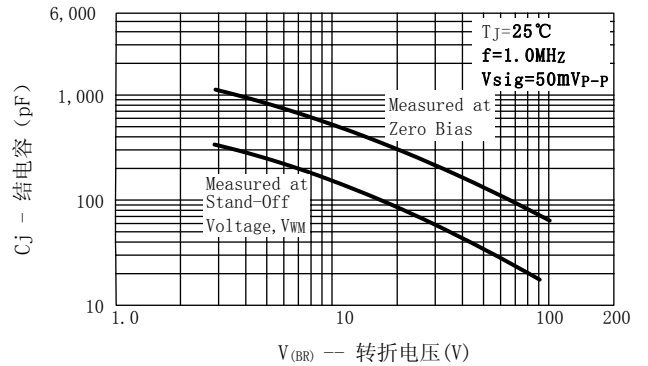


图5 稳态功率降额曲线

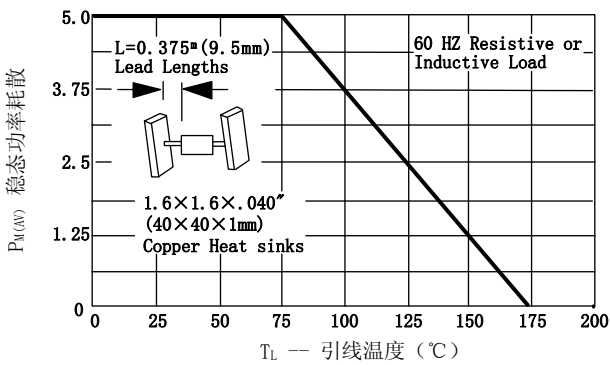


图6 最大步重复浪涌电流

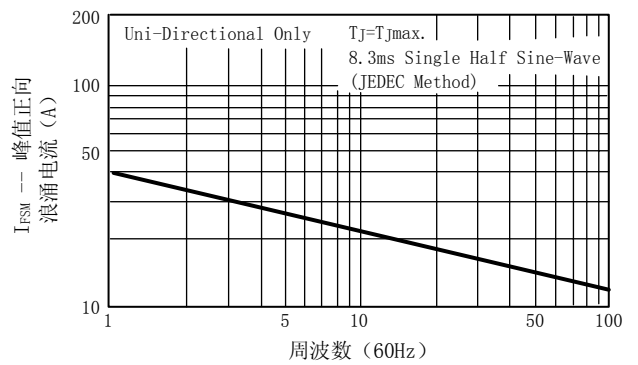


图7 典型反向泄漏特性

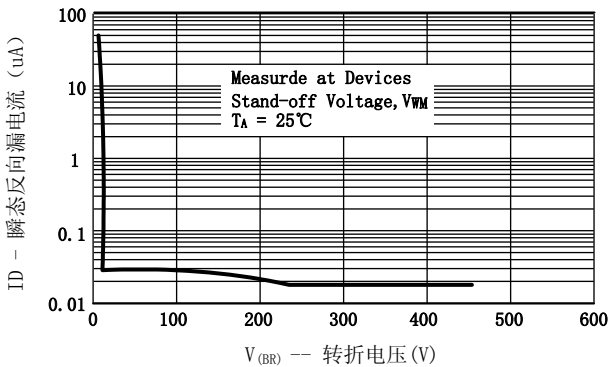


图8 典型瞬态热阻

