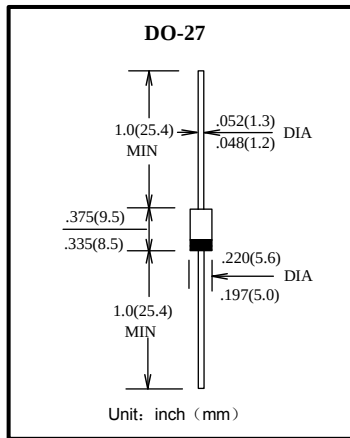


瞬间电压抑制二极管

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 1500	W
最大瞬间正向电压 $I_F = 100A$ Maximum Instantaneous Forward Voltage $V(BR) \leq 200V$ $V(BR) > 200V$	V_F	3.5 5.0	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}	200	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
1.5KE 6.8	6.12	7.48	10	5.50	1000	145	10.8	0.057
1.5KE 6.8A	6.45	7.14	10	5.80	1000	150	10.5	0.057
1.5KE 7.5	6.75	8.25	10	6.05	500	134	11.7	0.061
1.5KE 7.5A	7.13	7.88	10	6.40	500	139	11.3	0.061
1.5KE 8.2	7.38	9.02	10	6.63	200	126	12.5	0.065
1.5KE 8.2A	7.79	8.61	10	7.02	200	130	12.1	0.065
1.5KE 9.1	8.19	10.0	1.0	7.37	50	114	13.8	0.068
1.5KE 9.1A	8.65	9.55	1.0	7.78	50	117	13.4	0.068
1.5KE 10	9.00	11.0	1.0	8.10	10	105	15.0	0.073
1.5KE 10A	9.50	10.5	1.0	8.55	10	108	14.5	0.073
1.5KE 11	9.90	12.1	1.0	8.92	5.0	97	16.2	0.075
1.5KE 11A	10.5	11.6	1.0	9.40	5.0	100	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
1.5KE 12	10.8	13.2	1.0	9.72	5.0	91	17.3	0.076
1.5KE 12A	11.4	12.6	1.0	10.2	5.0	94	16.7	0.078
1.5KE 13	11.7	14.3	1.0	10.5	5.0	82	19.0	0.081
1.5KE 13A	12.4	13.7	1.0	11.1	5.0	86	18.2	0.081
1.5KE 15	13.5	16.5	1.0	12.1	1.0	71	22.0	0.084
1.5KE 15A	14.3	15.8	1.0	12.8	1.0	74	21.2	0.084
1.5KE 16	14.4	17.6	1.0	12.9	1.0	67	23.5	0.086
1.5KE 16A	15.2	16.8	1.0	13.6	1.0	70	22.5	0.086
1.5KE 18	16.2	19.8	1.0	14.5	1.0	59	26.5	0.088
1.5KE 18A	17.1	18.9	1.0	15.3	1.0	60	25.2	0.088
1.5KE 20	18.0	22.0	1.0	16.2	1.0	54	29.1	0.090
1.5KE 20A	19.0	21.0	1.0	17.1	1.0	56	27.7	0.090
1.5KE 22	19.8	24.2	1.0	17.8	1.0	49	31.9	0.092
1.5KE 22A	20.9	23.1	1.0	18.8	1.0	51	30.6	0.092
1.5KE 24	21.6	26.4	1.0	19.4	1.0	45	34.7	0.094
1.5KE 24A	22.8	25.2	1.0	20.5	1.0	47	33.2	0.094
1.5KE 27	24.3	29.7	1.0	21.8	1.0	40	39.1	0.096
1.5KE 27A	25.7	28.4	1.0	23.1	1.0	42	37.55	0.096
1.5KE 30	27.0	33.0	1.0	24.3	1.0	36	43.5	0.097
1.5KE 30A	28.5	31.5	1.0	25.6	1.0	38	41.4	0.097
1.5KE 33	29.7	36.3	1.0	26.8	1.0	33	47.7	0.098
1.5KE 33A	31.4	34.7	1.0	28.2	1.0	34	45.7	0.098
1.5KE 36	32.4	39.6	1.0	29.1	1.0	30	52.0	0.099
1.5KE 36A	34.2	37.8	1.0	30.8	1.0	31	49.9	0.099
1.5KE 39	35.1	42.9	1.0	31.6	1.0	27	56.4	0.100
1.5KE 39A	37.1	41.0	1.0	33.3	1.0	29	53.9	0.100
1.5KE 43	38.7	47.3	1.0	34.8	1.0	25	61.9	0.101
1.5KE 43A	40.9	45.2	1.0	36.8	1.0	26	59.3	0.101
1.5KE 47	42.3	51.7	1.0	38.1	1.0	23	67.8	0.101
1.5KE 47A	44.7	49.4	1.0	40.2	1.0	24	64.8	0.101
1.5KE 51	45.9	56.1	1.0	41.3	1.0	21	73.5	0.102
1.5KE 51A	48.5	53.6	1.0	43.6	1.0	22	70.1	0.102
1.5KE 56	50.4	61.6	1.0	45.4	1.0	19	80.5	0.103
1.5KE 56A	53.2	58.8	1.0	47.8	1.0	20	77.0	0.103
1.5KE 62	55.8	68.2	1.0	50.2	1.0	17	89.0	0.104
1.5KE 62A	58.9	65.1	1.0	53.0	1.0	18	85.0	0.104
1.5KE 68	61.2	74.8	1.0	55.1	1.0	16	98.0	0.104
1.5KE 68A	64.6	71.4	1.0	58.1	1.0	17	92.0	0.104
1.5KE 75	67.5	82.5	1.0	60.7	1.0	14	108	0.105
1.5KE 75A	71.3	78.8	1.0	64.1	1.0	15	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
1.5KE 82	73.8	90.2	1.0	66.4	1.0	13	118	0.105
1.5KE 82A	77.9	86.1	1.0	70.1	1.0	13.9	113	0.105
1.5KE 91	81.9	100	1.0	73.7	1.0	12	131	0.106
1.5KE 91A	86.5	95.5	1.0	77.8	1.0	12.6	125	0.106
1.5KE 100	90.0	110	1.0	81.0	1.0	10.9	144	0.106
1.5KE 100A	95.0	105	1.0	85.5	1.0	11.4	137	0.106
1.5KE 110	99.0	121	1.0	89.2	1.0	9.9	158	0.107
1.5KE 110A	105	116	1.0	94.0	1.0	10.3	152	0.107
1.5KE 120	108	132	1.0	97.2	1.0	9.1	173	0.107
1.5KE 120A	114	126	1.0	102	1.0	9.5	165	0.107
1.5KE 130	117	143	1.0	105	1.0	8.4	187	0.107
1.5KE 130A	124	137	1.0	111	1.0	8.7	179	0.107
1.5KE 150	135	165	1.0	121	1.0	7.3	215	0.108
1.5KE 150A	143	158	1.0	128	1.0	7.6	207	0.108
1.5KE 160	144	176	1.0	130	1.0	6.8	230	0.108
1.5KE 160A	152	168	1.0	136	1.0	7.1	219	0.108
1.5KE 170	153	187	1.0	138	1.0	6.4	244	0.108
1.5KE 170A	162	179	1.0	145	1.0	6.7	234	0.108
1.5KE 180	162	198	1.0	146	1.0	6.1	258	0.108
1.5KE 180A	171	189	1.0	154	1.0	6.4	246	0.108
1.5KE 200	180	220	1.0	162	1.0	5.4	287	0.108
1.5KE 200A	190	210	1.0	171	1.0	5.7	274	0.108
1.5KE 220	198	242	1.0	175	1.0	4.5	344	0.108
1.5KE 220A	209	231	1.0	185	1.0	4.8	328	0.108
1.5KE 250	225	275	1.0	202	1.0	4.3	360	0.110
1.5KE 250A	237	263	1.0	214	1.0	4.5	344	0.110
1.5KE 300	270	330	1.0	243	1.0	3.6	430	0.110
1.5KE 300A	285	315	1.0	256	1.0	3.8	414	0.110
1.5KE 350	315	385	1.0	284	1.0	3.1	504	0.110
1.5KE 350A	333	368	1.0	300	1.0	3.2	482	0.110
1.5KE 400	360	440	1.0	324	1.0	2.7	574	0.110
1.5KE 400A	380	420	1.0	342	1.0	2.8	548	0.110
1.5KE 440	396	484	1.0	356	1.0	2.4	631	0.110
1.5KE 440A	418	462	1.0	376	1.0	2.5	602	0.110

图1 峰值脉冲功率定额曲线

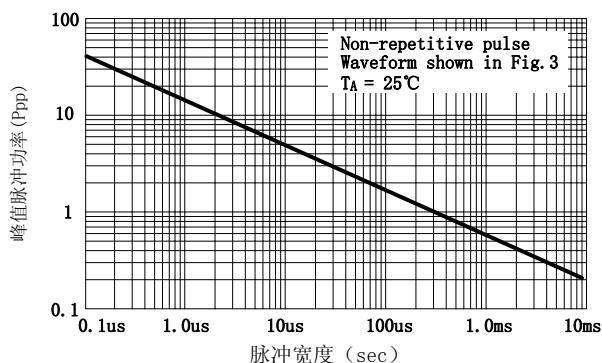


图2 脉冲降额曲线

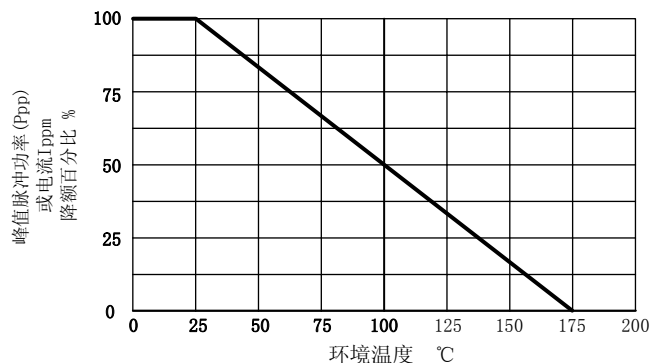


图3 脉冲波形

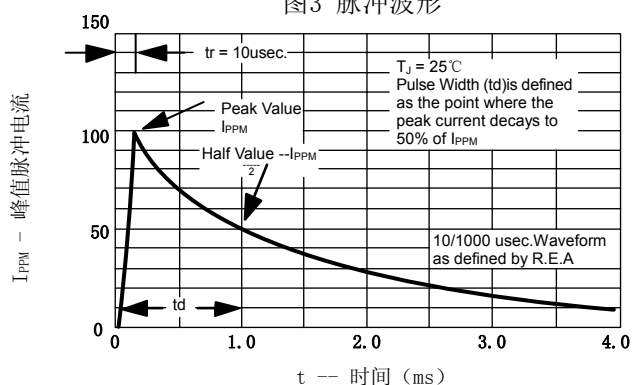


图4 单向典型结电容

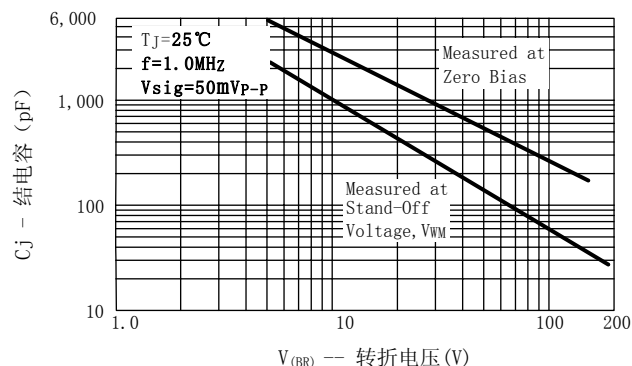


图5 稳态功率降额曲线

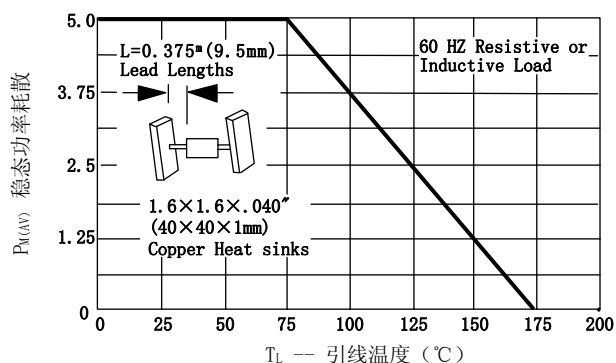


图6 最大步重复浪涌电流

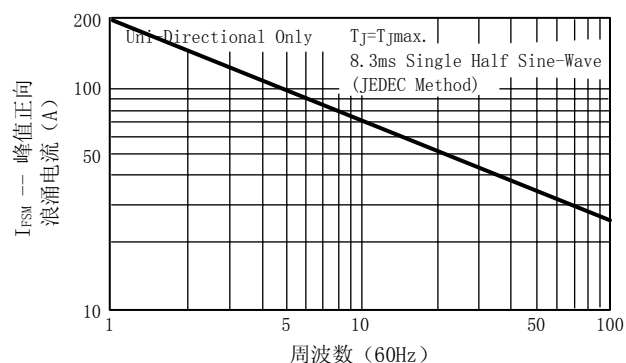


图7 典型反向泄漏特性

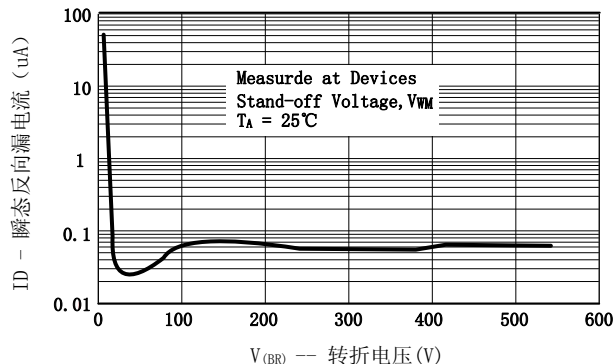


图8 典型瞬态热阻

