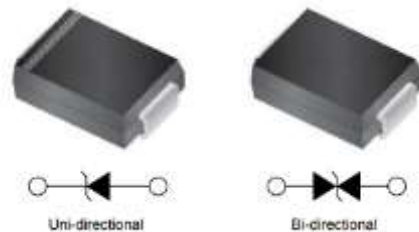


■ 特性

1. 玻璃钝化芯片
2. 响应时间快速
3. 钳位电压低
4. 漏电流小
5. 满足MSL1
6. JESD22-A114-B HBM: 15KV
7. JEDEC EIA/JESD22-C101F CDM: 500V
8. JEDEC EIA/JESD22-A115 MM: 400V
9. 符合IEC 61000-4-2 ±30kV (接触)、±30kV (空气)
10. 符合RoHS与无卤要求



■ 用途

1. 通信设备
2. 计算机
3. 工业设备
4. 消费电子设备

■ 机械数据

1. 封装型式: DO-214AB (SMC), 封装塑料符合防火等级UL94-V0
2. 镀锡引脚可焊性符合 MIL-STD-750, Method 2026.
3. 极性:有带状标示为阴极 (注:没有极性符号为双极性产品)

■ 编码规则

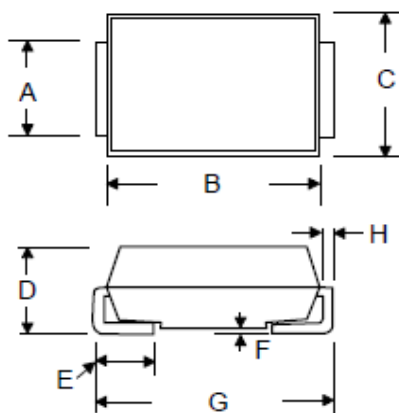
S	M	D	J	5	.	0	C	A	Y
1	2	3	4	5	6	7	8	9	10

产品类型	
SMDJ	兴勤 瞬态电压抑制二极管 SMDJ 系列

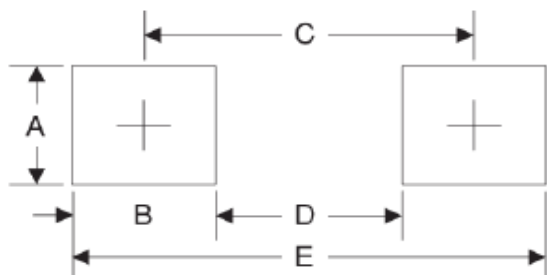
反向截止电压(V_{RWM})	
5.0	5V
70	70V
120	120V

类型代码	
AY	单向, 5%反向击穿电压 V_{BR} 公差
CAY	双向 5%反向击穿电压 V_{BR} 公差

■ 结构与尺寸



Symbol	Dimensions in millimeters	
	Min	Max
A	2.90	3.20
B	6.60	7.11
C	5.59	6.22
D	2.06	2.62
E	0.76	1.52
F	-	0.20
G	7.75	8.13
H	0.15	0.31



Symbol	Unit (mm)	Unit (inch)
A	3.30	0.130
B	2.50	0.098
C	6.80	0.268
D	4.40	0.173
E	9.40	0.370

■ 最大标称资料 (TA=25°C)

参数	代号	数值	单位
10/1000μs 波型峰值脉冲功耗(Note1, 2)	P _{PPM}	3000	W
10/1000us 波型峰值脉冲电流.(Note1)	I _{PPM}	See next table	A
峰值正向浪涌电流 (Note 3)	I _{FSM}	300	A
稳态功耗 (T _L =75°C)	P _D	6.5	W
热阻	R _{θJA}	75	°C/W
热阻	R _{θJL}	15	°C/W
工作结温和存储温度范围	T _J , T _{STG}	-55 to +150	°C

注: 1.非重复性电流脉冲如图3, 及25°C以上减额曲线如图2。

2.安装在8.0 x 8.0mm的铜板上。

3.8.3ms 单半正弦波, 占空比最大为每分钟4个脉冲。

瞬态电压抑制二极管: SMDJ 系列

3000W 表面贴装型



■ 电气特性 (T_A=25°C)

型号. (单向)	型号. (双向)	反向截止电压	反向击穿电压 V _{BR} @ I _T		测试 电流 I _T (mA)	最大限制 电压 V _C @ I _{pp}	最大脉冲 峰值电流	最大反向 漏电流 I _R @ V _{RWM}	印字	
		V _{RWM} (V)	Min (V)	Max (V)		V _C (V)	I _{pp} (A)	I _R (μA)	单向	双向
SMDJ5.0AY	SMDJ5.0CAY	5	6.4	7.00	10	9.2	326.09	800	RDE	DDE
SMDJ6.0AY	SMDJ6.0CAY	6	6.7	7.37	10	10.3	291.26	800	RDG	DDG
SMDJ6.5AY	SMDJ6.5CAY	6.5	7.2	7.98	10	11.2	267.86	500	RDK	DDK
SMDJ7.0AY	SMDJ7.0CAY	7	7.8	8.60	10	12	250.00	200	PDM	DDM
SMDJ7.5AY	SMDJ7.5CAY	7.5	8.3	9.21	1	12.9	232.56	100	PDP	DDP
SMDJ8.0AY	SMDJ8.0CAY	8	8.9	9.83	1	13.6	220.59	50	PDR	DDR
SMDJ8.5AY	SMDJ8.5CAY	8.5	9.4	10.40	1	14.4	208.33	20	PDT	DDT
SMDJ9.0AY	SMDJ9.0CAY	9	10	11.10	1	15.4	194.81	10	PDV	DDV
SMDJ10AY	SMDJ10CAY	10	11.1	12.30	1	17	176.47	5	PDX	DDX
SMDJ11AY	SMDJ11CAY	11	12.2	13.50	1	18.2	164.84	2	PDZ	DDZ
SMDJ12AY	SMDJ12CAY	12	13.3	14.70	1	19.9	150.75	2	PEE	DEE
SMDJ13AY	SMDJ13CAY	13	14.4	15.90	1	21.5	139.53	2	PEG	DEG
SMDJ14AY	SMDJ14CAY	14	15.6	17.20	1	23.2	129.31	2	PEK	DEK
SMDJ15AY	SMDJ15CAY	15	16.7	18.50	1	24.4	122.95	2	PEM	DEM
SMDJ16AY	SMDJ16CAY	16	17.8	19.70	1	26	115.38	2	PEP	DEP
SMDJ17AY	SMDJ17CAY	17	18.9	20.90	1	27.6	108.70	2	PER	DER
SMDJ18AY	SMDJ18CAY	18	20	22.10	1	29.2	102.74	2	PET	DET
SMDJ19AY	SMDJ19CAY	19	21.1	23.30	1	30.8	97.47	2	PEW	DEW
SMDJ20AY	SMDJ20CAY	20	22.2	24.50	1	32.4	92.59	2	PEV	DEV
SMDJ22AY	SMDJ22CAY	22	24.4	26.90	1	35.5	84.51	2	PEX	DEX
SMDJ24AY	SMDJ24CAY	24	26.7	29.50	1	38.9	77.12	2	PEZ	DEZ
SMDJ26AY	SMDJ26CAY	26	28.9	31.90	1	42.1	71.26	2	PFE	DFE
SMDJ28AY	SMDJ28CAY	28	31.1	34.40	1	45.4	66.08	2	PFG	DFG
SMDJ30AY	SMDJ30CAY	30	33.3	36.80	1	48.4	61.98	2	PFK	DFK
SMDJ33AY	SMDJ33CAY	33	36.7	40.60	1	53.3	56.29	2	PFM	DFM
SMDJ36AY	SMDJ36CAY	36	40	44.20	1	58.1	51.64	2	PFP	DFP
SMDJ40AY	SMDJ40CAY	40	44.4	49.10	1	64.5	46.51	2	PFR	DFR
SMDJ43AY	SMDJ43CAY	43	47.8	52.80	1	69.4	43.23	2	PFT	DFT
SMDJ45AY	SMDJ45CAY	45	50	55.30	1	72.7	41.27	2	PFV	DFV
SMDJ48AY	SMDJ48CAY	48	53.3	58.90	1	77.4	38.76	2	PFX	DFX

瞬态电压抑制二极管: SMDJ 系列

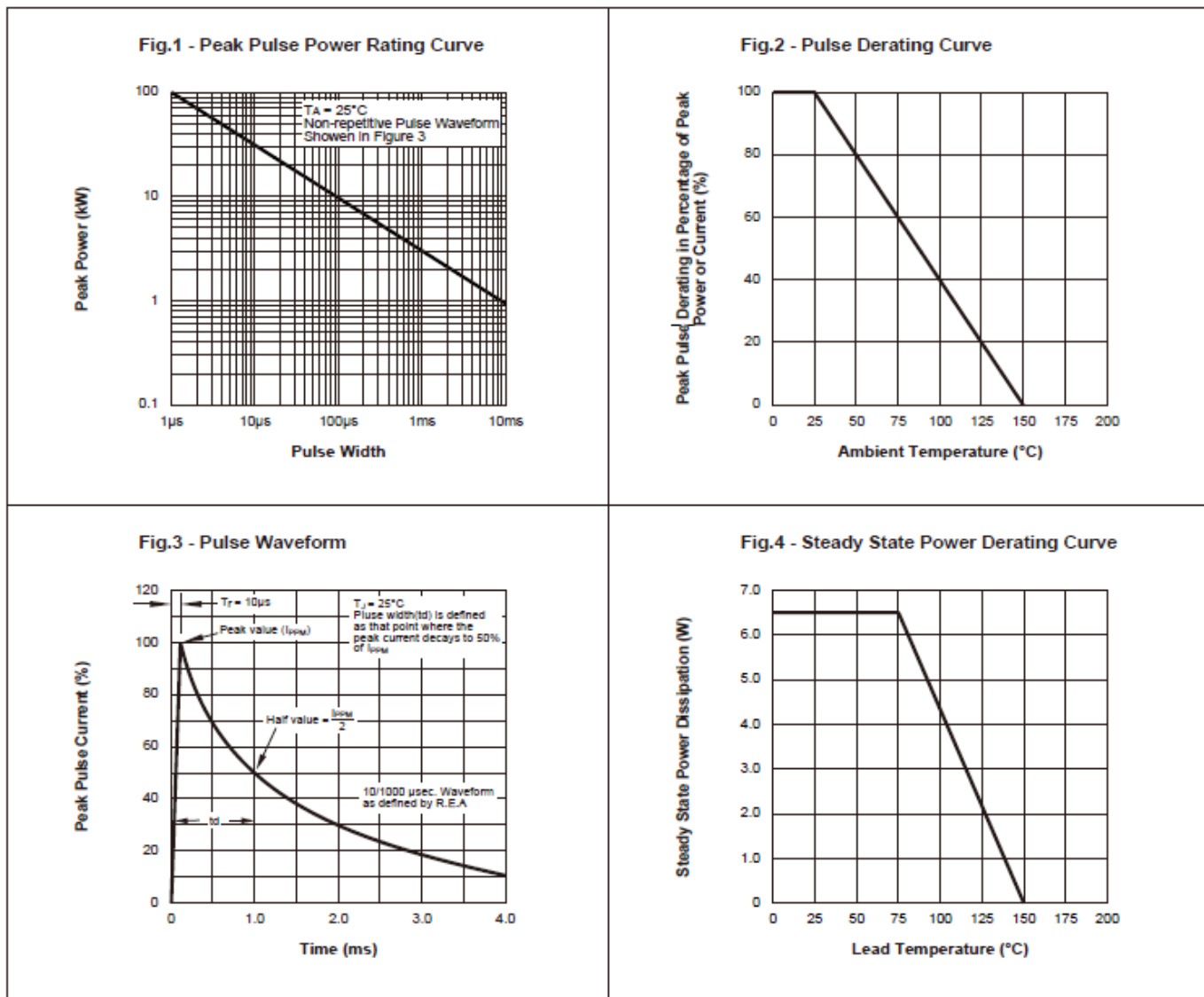
3000W 表面贴装型



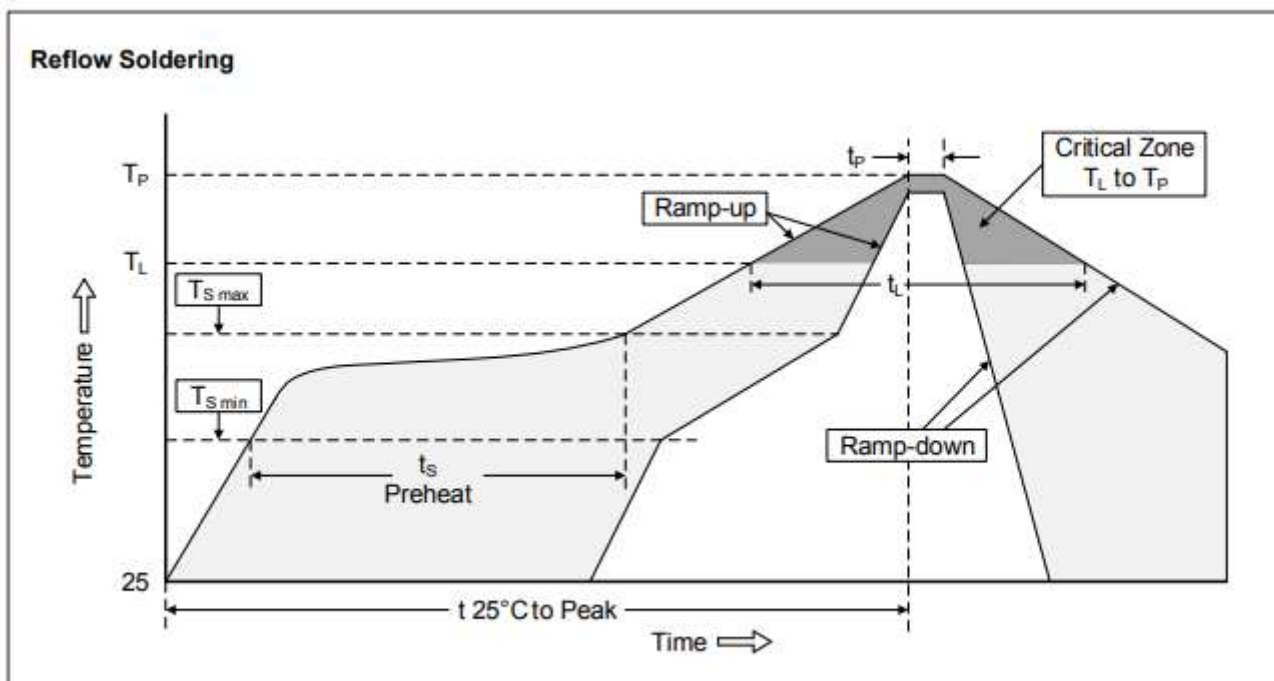
■ 电气特性 (T_A=25°C)

型号. (单向)	型号. (双向)	反向截止 电压	反向击穿电压 V _{BR} @ I _T		测试 电流	最大限制 电压 V _C @ I _{pp}	最大脉冲 峰值电流	最大反向 漏电流 I _R @ V _{RWM}	印字	
			V _{RWM} (V)	Min (V)					Max (V)	I _T (mA)
SMDJ51AY	SMDJ51CAY	51	56.7	62.70	1	82.4	36.41	2	PFZ	DFZ
SMDJ54AY	SMDJ54CAY	54	60	66.30	1	87.1	34.44	2	RGE	DGE
SMDJ58AY	SMDJ58CAY	58	64.4	71.20	1	93.6	32.05	2	PGG	DGG
SMDJ60AY	SMDJ60CAY	60	66.7	73.70	1	96.8	30.99	2	PGK	DGK
SMDJ64AY	SMDJ64CAY	64	71.1	78.60	1	103	29.13	2	PGM	DGM
SMDJ70AY	SMDJ70CAY	70	77.8	86.00	1	113	26.55	2	PGP	DGP
SMDJ75AY	SMDJ75CAY	75	83.3	92.10	1	121	24.79	2	PGR	DGR
SMDJ78AY	SMDJ78CAY	78	86.7	95.80	1	126	23.81	2	PGT	DGT
SMDJ80AY	SMDJ80CAY	80	88.8	97.60	1	129.6	23.15	2	PGW	DGW
SMDJ85AY	SMDJ85CAY	85	94.4	104.00	1	137	21.9	2	PGV	DGV
SMDJ90AY	SMDJ90CAY	90	100.0	111.00	1	146	20.55	2	PGX	DGX
SMDJ100AY	SMDJ100CAY	100	111.0	123.00	1	162	18.52	2	PGZ	DGZ
SMDJ110AY	SMDJ110CAY	110	122.0	135.00	1	177	16.95	2	PHE	DHE
SMDJ120AY	SMDJ120CAY	120	133.0	147.00	1	193	15.54	2	PHG	DHG
SMDJ130AY	SMDJ130CAY	130	144.0	159.00	1	209	14.35	2	PHK	DHK
SMDJ140AY	SMDJ140CAY	140	155.0	171.00	1	226.8	13.2	2	PHW	DHW
SMDJ150AY	SMDJ150CAY	150	167.0	185.00	1	243	12.35	2	PHM	DHM
SMDJ160AY	SMDJ160CAY	160	178.0	197.00	1	259	11.58	2	PHP	DHP
SMDJ170AY	SMDJ170CAY	170	189.0	209.00	1	275	10.91	2	PHR	DHR
SMDJ180AY	SMDJ180CAY	180	200.0	220.00	1	291.6	10.29	2	PHT	DHT
SMDJ190AY	SMDJ190CAY	190	211.0	232.00	1	307.8	9.75	2	PHX	DHX
SMDJ200AY	SMDJ200CAY	200	224.0	247.00	1	324	9.26	2	PHZ	DHZ
SMDJ220AY	SMDJ220CAY	220	246.0	272.00	1	356	8.43	2	PKE	DKE
SMDJ250AY	SMDJ250CAY	250	279.0	309.00	1	405	7.41	2	PKG	DKG
SMDJ300AY	SMDJ300CAY	300	335.0	371.00	1	486	6.17	2	PKM	DKM
SMDJ350AY	SMDJ350CAY	350	391.0	432.00	1	567	5.29	2	PKP	DKP
SMDJ400AY	SMDJ400CAY	400	447.0	494.00	1	648	4.63	2	PKZ	DKZ
SMDJ440AY	SMDJ440CAY	440	492.0	543.00	1	713	4.21	2	PPE	DPE

■ 特性曲线图 (TA=25°C)



■ 推荐焊接条件



Recommended Conditions

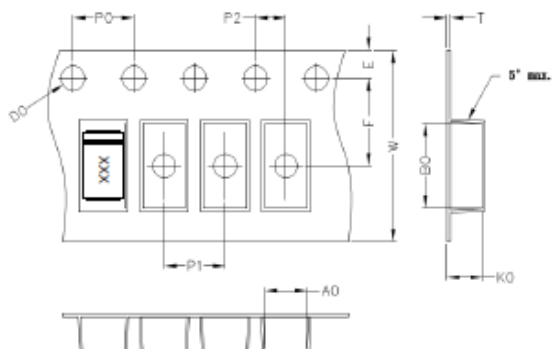
Profile Feature	Pb-Free Assembly
Average ramp-up rate (T_L to T_P)	3°C/second max.
Preheat	
-Temperature Min ($T_{S\ min}$)	150°C
-Temperature Max ($T_{S\ max}$)	200°C
-Time (min to max) (t_S)	60-180 seconds
$T_{S\ max}$ to T_L	
-Ramp-up Rate	3°C/second max.
Time maintained above:	
-Temperature (T_L)	217°C
-Time (t_L)	60-150 seconds
Peak Temperature (T_P)	260°C
Time within 5°C of actual Peak Temperature (t_P)	20-40 seconds
Ramp-down Rate	6°C/second max.
Time 25°C to Peak Temperature	8 minutes max.

瞬态电压抑制二极管: SMDJ 系列

3000W 表面贴装型



■ 包装



A0	B0	K0	D0	E	F
6.05	8.31	2.54	1.55	1.75	7.50
P0	P1	P2	T	W	Tolerance
4.0	8.0	2.0	0.25	16	0.1

■ 数量

系列	包装	数量	包装规范
SMDJ	Tape and reel	3000pcs / reel	EIA STD RS-481

■ 仓库存储条件

- 存储条件:
 1. 储存温度: $-10^{\circ}\text{C} \sim +40^{\circ}\text{C}$
 2. 相对湿度: $\leq 75\% \text{RH}$
 3. 不要将本产品存放在有腐蚀性气体或是阳光直接照射的环境中保管
- 存储期限: 1 年