

SOD-123FL TVS 瞬态电压抑制二极管

■Features 特点

ESD 30KV Air, 30KV contact 静电释放电压 30KV 空气放电与 30KV 接触放电

Solid-state silicon avalanche technology 固态硅雪崩技术

Low leakage current 低漏电流

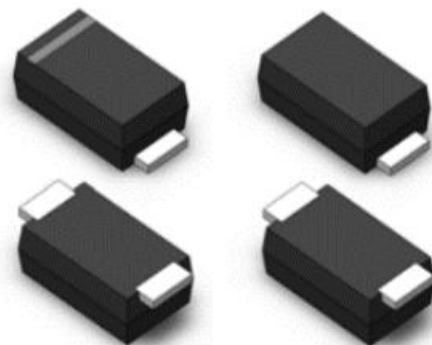
■Applications 应用

Personal digital assistants (PDA) 个人数码助手

Handhelds and notebooks 手持式笔记本

Portable devices 桌面设备

Digital cameras 数码相机



■Internal Schematic Diagram 内部结构



■Absolute Maximum Ratings 最大额定值

Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
Peak Power Dissipation 峰值功率	P_{PK}	200	W
Reverse Stand-off Work Voltage 反向工作电压	V_{RWM}	5.0~440	V
Peak Pulse Current 峰值脉冲电流	I_{PP}	21.7~0.3	A
Thermal Resistance Junction-Ambient 结到环境热阻	$R_{\theta JA}$	125	°C/W
Junction/Storage Temperature 结温/储存温度	T_J, T_{stg}	-55~150	°C

■Electrical Characteristics 电特性

($T_A=25^{\circ}\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

Type Number	V _{RWM} (V)	V _{BR} (V)@I _T		I _T (mA)	V _C (V) @I _{PP}	I _{PP} (A)	I _R (μA) @V _{RWM}	Marking	
		Min.	Max.					A(UNI)	CA(BI)
SMF5.0(C)A	5.0	6.40	7.25	10	9.2	21.7	200	AE	CAE
SMF6.0(C)A	6.0	6.67	7.67	10	10.3	19.4	200	AG	CAG
SMF6.5(C)A	6.5	7.22	8.30	10	11.2	17.9	150	AK	CAK
SMF7.0(C)A	7.0	7.78	8.95	10	12.0	16.7	75	AM	CAM
SMF7.5(C)A	7.5	8.33	9.58	1	12.9	15.5	50	AP	CAP
SMF8.0(C)A	8.0	8.89	10.23	1	13.6	14.7	25	AR	CAR
SMF8.5(C)A	8.5	9.44	10.82	1	14.4	13.9	20	AT	CAT
SMF9.0(C)A	9.0	10.0	11.50	1	15.4	13.0	10	AV	CAV
SMF10(C)A	10	11.1	12.80	1	17.0	11.8	5	AX	CAX
SMF11(C)A	11	12.2	14.00	1	18.2	11.0	1	AZ	CAZ
SMF12(C)A	12	13.3	15.30	1	19.9	10.1	1	BE	CBE
SMF13(C)A	13	14.4	15.60	1	21.5	9.3	1	BG	CBG
SMF14(C)A	14	15.6	17.90	1	23.2	8.62	1	BK	CBK
SMF15(C)A	15	16.7	19.20	1	24.4	8.2	1	BM	CBM
SMF16(C)A	16	17.8	20.50	1	26.0	7.69	1	BP	CBP
SMF17(C)A	17	18.9	21.70	1	27.6	7.25	1	BR	CBR
SMF18(C)A	18	20.0	23.30	1	29.2	6.85	1	BT	CBT
SMF20(C)A	20	22.2	25.50	1	32.4	6.17	1	BV	CBV
SMF22(C)A	22	24.4	28.00	1	35.5	5.63	1	BX	CBX
SMF24(C)A	24	26.7	30.70	1	38.9	5.14	1	BZ	CBZ
SMF26(C)A	26	28.9	33.20	1	42.1	4.75	1	CE	CCE
SMF28(C)A	28	31.1	35.80	1	45.4	4.41	1	CG	CCG
SMF30(C)A	30	33.3	38.30	1	48.4	4.13	1	CK	CCK
SMF33(C)A	33	36.7	42.20	1	53.3	3.75	1	CM	CCM
SMF36(C)A	36	40.0	46.00	1	58.1	3.44	1	CP	CCP
SMF40(C)A	40	44.4	51.10	1	64.5	3.1	1	CR	CCR
SMF43(C)A	43	47.8	54.90	1	69.4	2.88	1	CT	CCT
SMF45(C)A	45	50.0	57.50	1	72.7	2.75	1	CV	CCV
SMF48(C)A	48	53.3	61.30	1	77.4	2.58	1	CX	CCX
SMF51(C)A	51	56.7	65.20	1	82.4	2.43	1	CZ	CCZ
SMF54(C)A	54	60.0	69.00	1	87.1	2.3	1	DE	CDE
SMF58(C)A	58	64.4	74.10	1	93.6	2.14	1	DG	CDG
SMF60(C)A	60	66.7	76.70	1	96.8	2.07	1	DK	CDK
SMF64(C)A	64	71.1	81.80	1	103	1.94	1	DM	CDM
SMF70(C)A	70	77.8	89.50	1	113	1.77	1	DP	CDP
SMF75(C)A	75	83.3	95.80	1	121	1.65	1	DR	CDR
SMF78(C)A	78	86.7	99.70	1	126	1.59	1	DT	CDT
SMF85(C)A	85	94.4	108.2	1	137	1.46	1	DV	CDV
SMF90(C)A	90	100	115.5	1	146	1.37	1	DX	CDX
SMF100(C)A	100	111	128.0	1	162	1.23	1	DZ	CDZ
SMF110(C)A	110	122	140.5	1	177	1.13	1	EE	CEE
SMF120(C)A	120	133	153.0	1	193	1.04	1	EG	CEG
SMF130(C)A	130	144	165.5	1	209	0.96	1	EK	CEK
SMF150(C)A	150	167	192.5	1	243	0.82	1	EM	CEM
SMF160(C)A	160	178	205.0	1	259	0.77	1	EP	CEP
SMF170(C)A	170	189	217.5	1	275	0.73	1	ER	CER
SMF180(C)A	180	201	222.0	1	328	0.91	5	ET	CET
SMF200(C)A	200	224	247.0	1	332	0.89	5	EX	CEX
SMF220(C)A	220	246	272.0	1	352	0.8	5	E22	CE22
SMF250(C)A	250	279	309.0	1	405	0.75	5	E25	CE25
SMF300(C)A	300	335	371.0	1	486	0.7	5	E30	CE30
SMF350(C)A	350	391	432.0	1	567	0.7	5	E35	CE35
SMF400(C)A	400	447	494.0	1	648	0.6	5	E40	CE40
SMF440(C)A	440	492	543.0	1	713	0.3	5	E44	CE44

■ Typical Characteristic Curve 典型特性曲线

FIG.1-PEAK PULSE POWER DERATING CURVE

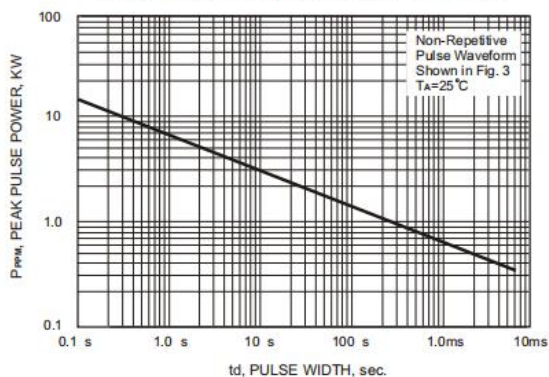


FIG.2-PULSE DERATING CURVE

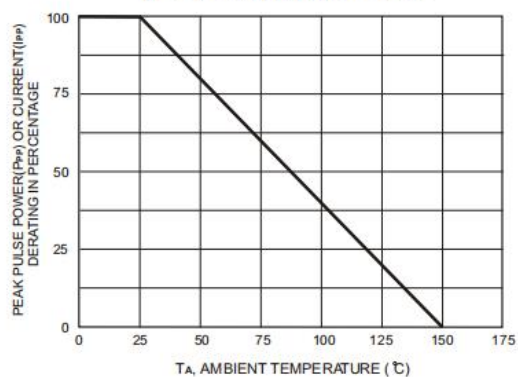


FIG.3-PULSE WAVE FORM

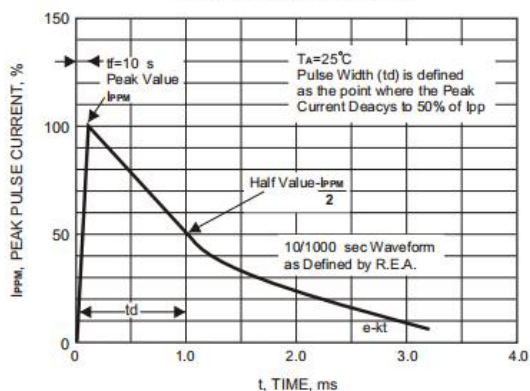
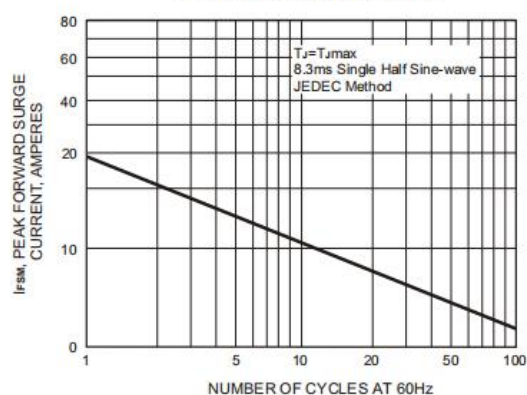
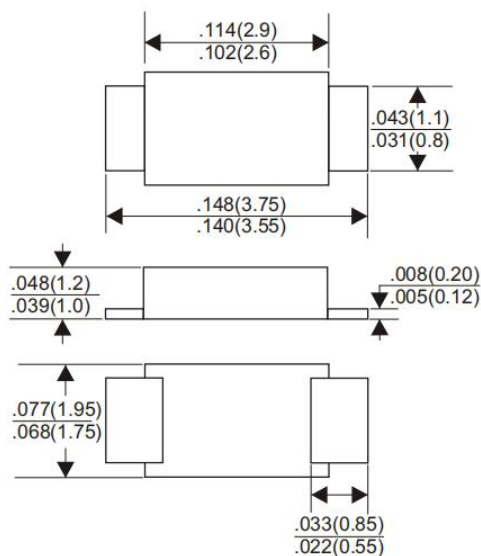


FIG.4-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



■ Dimension 外形封装尺寸



Dimensions in inches and (millimeters)