

SMB TVS 瞬态电压抑制二极管

■Features 特点

Excellent Clamping Capability 优秀的钳位能力

Fast Response Time 快速反应时间

Built-in Strain Relief 内应力释放

■Applications 应用

Clamping Voltage 钳制电压

■Internal Schematic Diagram 内部结构



HF RoHS



■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}	600	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}	65.2~0.9	A
Peak Forward Surge Current 峰值正向浪涌电流(UNI)	I_{FSM}	100	A
Forward Voltage@ $I_F=35A$ 正向电压(UNI)	V_F	3.5	V
Power Dissipation 耗散功率	P_D	5	W
Junction/Storage Temperature 结温/储存温度	T_J, T_{stg}	-55~150	°C

■Electrical Characteristics 电特性

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

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)
SMBJ5.0(C)A-6AF	5.0	6.40	7.25	10	9.2	65.2	800	KE	AE
SMBJ6.0(C)A-6AF	6.0	6.67	7.67	10	10.3	58.3	800	KG	AG
SMBJ6.5(C)A-6AF	6.5	7.22	8.30	10	11.2	53.6	500	KK	AK
SMBJ7.0(C)A-6AF	7.0	7.78	8.95	10	12.0	50.0	200	KM	AM
SMBJ7.5(C)A-6AF	7.5	8.33	9.58	1	12.9	46.5	100	KP	AP
SMBJ8.0(C)A-6AF	8.0	8.89	10.23	1	13.6	44.1	50	KR	AR
SMBJ8.5(C)A-6AF	8.5	9.44	10.82	1	14.4	41.7	10	KT	AT
SMBJ9.0(C)A-6AF	9.0	10.0	11.50	1	15.4	39.0	5	KV	AV
SMBJ10(C)A-6AF	10	11.1	12.80	1	17.0	35.3	5	KX	AX
SMBJ11(C)A-6AF	11	12.2	14.00	1	18.2	33.0	5	KZ	AZ
SMBJ12(C)A-6AF	12	13.3	15.30	1	19.9	30.2	5	LE	BE
SMBJ13(C)A-6AF	13	14.4	15.60	1	21.5	27.9	5	LG	BG
SMBJ14(C)A-6AF	14	15.6	17.90	1	23.2	25.8	5	LK	BK
SMBJ15(C)A-6AF	15	16.7	19.20	1	24.4	24.0	5	LM	BM
SMBJ16(C)A-6AF	16	17.8	20.50	1	26.0	23.1	5	LP	BP
SMBJ17(C)A-6AF	17	18.9	21.70	1	27.6	21.7	5	LR	BR
SMBJ18(C)A-6AF	18	20.0	23.30	1	29.2	20.5	5	LT	BT
SMBJ20(C)A-6AF	20	22.2	25.50	1	32.4	18.5	5	LV	BV
SMBJ22(C)A-6AF	22	24.4	28.00	1	35.5	16.9	5	LX	BX
SMBJ24(C)A-6AF	24	26.7	30.70	1	38.9	15.4	5	LZ	BZ
SMBJ26(C)A-6AF	26	28.9	33.20	1	42.1	14.2	5	ME	CE
SMBJ28(C)A-6AF	28	31.1	35.80	1	45.4	13.2	5	MG	CG
SMBJ30(C)A-6AF	30	33.3	38.30	1	48.4	12.4	5	MK	CK
SMBJ33(C)A-6AF	33	36.7	42.20	1	53.3	11.3	5	MM	CM
SMBJ36(C)A-6AF	36	40.0	46.00	1	58.1	10.3	5	MP	CP
SMBJ40(C)A-6AF	40	44.4	51.10	1	64.5	9.3	5	MR	CR
SMBJ43(C)A-6AF	43	47.8	54.90	1	69.4	8.6	5	MT	CT
SMBJ45(C)A-6AF	45	50.0	57.50	1	72.7	8.3	5	MV	CV
SMBJ48(C)A-6AF	48	53.3	61.30	1	77.4	7.7	5	MX	CX
SMBJ51(C)A-6AF	51	56.7	65.20	1	82.4	7.3	5	MZ	CZ
SMBJ54(C)A-6AF	54	60.0	69.00	1	87.1	6.9	5	NE	DE
SMBJ58(C)A-6AF	58	64.4	74.10	1	93.6	6.4	5	NG	DG
SMBJ60(C)A-6AF	60	66.7	76.70	1	96.8	6.2	5	NK	DK
SMBJ64(C)A-6AF	64	71.1	81.80	1	103	5.8	5	NM	DM
SMBJ70(C)A-6AF	70	77.8	89.50	1	113	5.3	5	NP	DP
SMBJ75(C)A-6AF	75	83.3	95.80	1	121	4.9	5	NR	DR
SMBJ78(C)A-6AF	78	86.7	99.70	1	126	4.7	5	NT	DT
SMBJ85(C)A-6AF	85	94.4	108.2	1	137	4.4	5	NV	DV
SMBJ90(C)A-6AF	90	100	115.5	1	146	4.1	5	NX	DX
SMBJ100(C)A-6AF	100	111	128.0	1	162	3.7	5	NZ	DZ
SMBJ110(C)A-6AF	110	122	140.5	1	177	3.4	5	PE	EE
SMBJ120(C)A-6AF	120	133	153.0	1	193	3.1	5	PG	EG
SMBJ130(C)A-6AF	130	144	165.5	1	209	2.9	5	PK	EK
SMBJ150(C)A-6AF	150	167	192.5	1	243	2.5	5	PM	EM
SMBJ160(C)A-6AF	160	178	205.0	1	259	2.3	5	PP	EP
SMBJ170(C)A-6AF	170	189	217.5	1	275	2.2	5	PR	ER
SMBJ188(C)A-6AF	188	209	231.0	1	328	2.0	5	PT	ET
SMBJ200(C)A-6AF	200	224	247.0	1	332	1.9	5	PV	EV
SMBJ220(C)A-6AF	220	246	272.0	1	352	1.5	5	PX	EX
SMBJ250(C)A-6AF	250	279	305.0	1	405	1.5	5	PZ	EZ
SMBJ300(C)A-6AF	300	335	371.0	1	486	1.3	5	QE	FE
SMBJ350(C)A-6AF	350	391	432.0	1	567	1.1	5	QG	FG
SMBJ400(C)A-6AF	400	447	494.0	1	648	0.9	5	QK	FK
SMBJ440(C)A-6AF	440	492	543.0	1	713	0.9	5	QM	FM

■ Typical Characteristic Curve 典型特性曲线

FIG.1-PEAK PULSE POWER DERATING CURVE

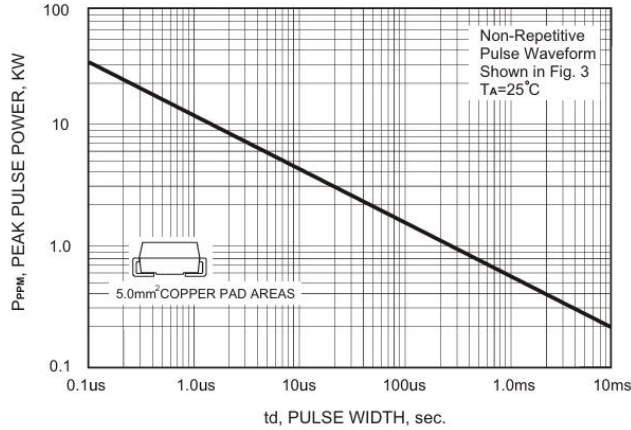


FIG.2-PULSE DERATING CURVE

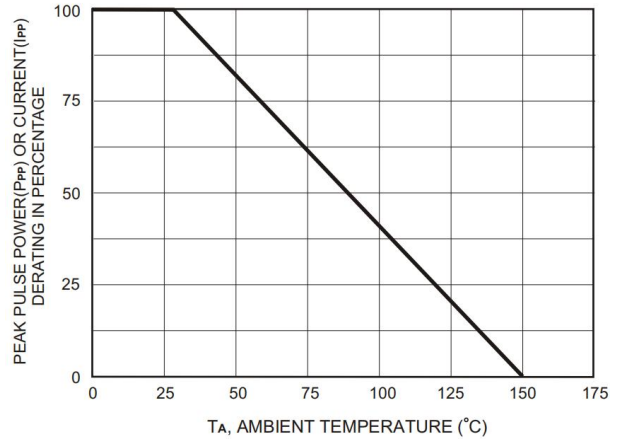


FIG.3-PULSE WAVE FORM

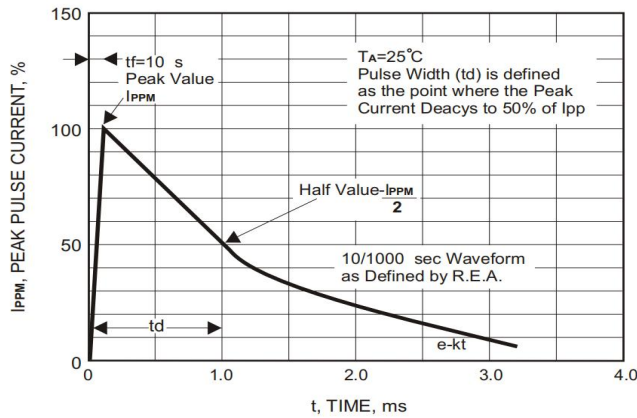


FIG.5-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

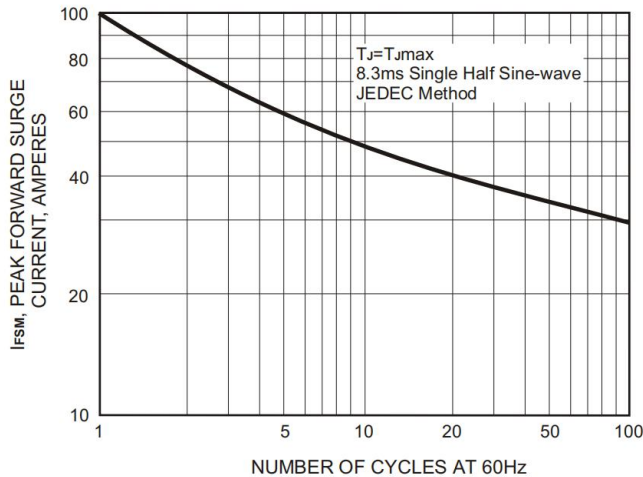
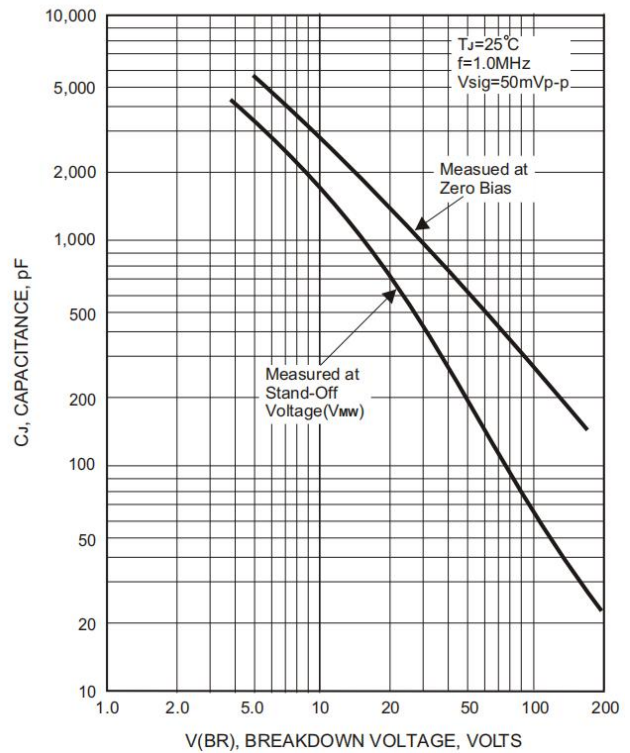
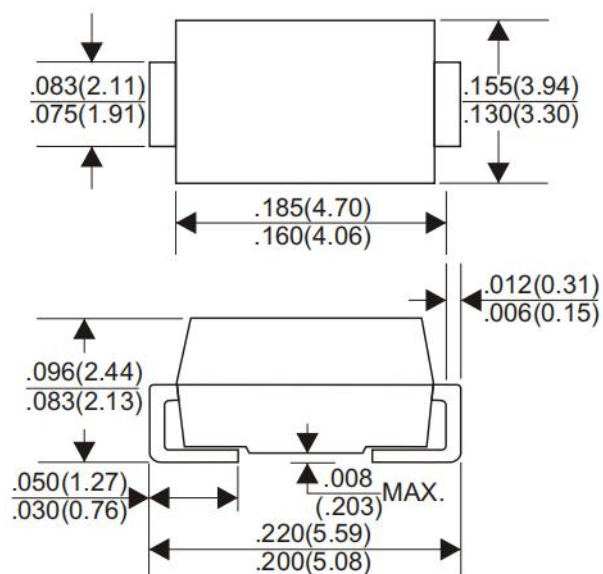


FIG.4-TYPICAL JUNCTION CAPACITANCE



■Dimension 外形封装尺寸

DO-214AA(SMB)



Dimensions in inches and (millimeters)