

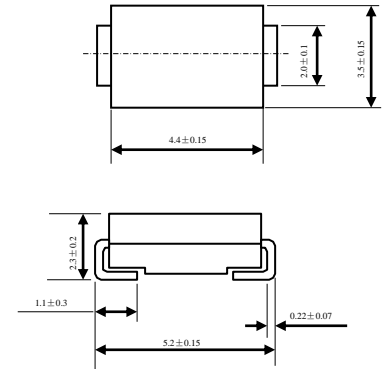
特 性:

- ◆ 600W 峰值脉冲功率
- ◆ 优良的箝制能力
- ◆ 较小的箝位因子
- ◆ 快速响应时间：从 0 V 到 V_{BR} ，单向型小于 1.0ps，双向型小于 5.0ns

机械性能:

- ◆ 封 装: 模塑封装
- ◆ 塑封材料: 用 UL94V-0 认可的阻燃环氧料
- ◆ 端 子: 镀锡
- ◆ 极 性: 色环表示阴极
- ◆ 安装位置: 任意

SMB / DO-214AA



600W 表面贴装 TVS

尺寸单位: inch (mm)

最大额定值及电气特性

测量环境温度为 25°C，除非另有规定。

参 数 名 称	符 号	额 定 值	单 位
最大峰值脉冲功率	P_{ppm}	最小 600	W
最大峰值反向脉冲电流(注释 1)	I_{ppm}	见表	A
稳态功率(注释 2)	$P_m (AV)$	5.0	W
最大峰值正向浪涌电流(注释 3)	I_{FSM}	100	A
最大瞬态正向电压 @ 50 A 仅对单向型(注释 4)	V_F	3.5	V
工作及储存温度	T_J, T_{STG}	-55 ~ +175	°C

- 注 释：
1. 脉冲电流时间 10 / 1000 μs 。
 2. 在引线末端安装面积为 5.0mm²，厚 0.013mm 的散热铜片。
 3. 使用单相正弦半波，时间 10ms；或使用等效的方波，4 周波/分。

P6SMB Series

电特性 (测量环境温度为25°C, 除非另有规定)
ELECTRICAL CHARACTERISTICS (at TA=25 °C unless otherwise noted)

型号 TYPE	标识代码 Marking		击穿电压 BREAKDOWN VOLTAGE		测试电流 TEST CURRENT	变位电压 REVERSE STAND-OFF VOLTAGE	最大反向漏电流 REVERSE LEAKAGE	最大峰值脉冲电流 PEAK PULSE CURRENT	最大钳位电压 MAXIMUM CLAMPING VOLTAGE	击穿电压 最大温度系数 MAXIMUM TEMPERATURE COEFFICIENT OF V _(BR)
	单向	双向	V _(BR) (注释 1)		I _T	V _{RM}	I _D @ V _{RM} (注释 2)	I _{ppm}	V _C @ I _{ppm}	
			V(最小 MIN)	V(最大 MAX)	mA	V	μA	A	V	% / °C
P6SMB6.8			6.12	7.48	10.0	5.50	1000.0	58.0	10.8	0.057
P6SMB6.8A	6V8A	6V8C	6.45	7.14	10.0	5.80	1000.0	60.0	10.5	0.057
P6SMB7.5			6.75	8.25	10.0	6.05	500.0	53.0	11.7	0.061
P6SMB7.5A	7V5A	7V5C	7.13	7.88	10.0	6.40	500.0	55.0	11.3	0.061
P6SMB8.2			7.38	9.02	10.0	6.63	200.0	50.0	12.5	0.065
P6SMB8.2A	8V2A	8V2C	7.79	8.61	10.0	7.02	200.0	52.0	12.1	0.065
P6SMB9.1			8.19	10.0	1.0	7.37	50.0	45.0	13.8	0.068
P6SMB9.1A	9V1A	9V1C	8.65	9.55	1.0	7.78	50.0	47.0	13.4	0.068
P6SMB10			9.00	11.0	1.0	8.10	10.0	42.0	15.0	0.073
P6SMB10A	10A	10C	9.50	10.5	1.0	8.55	10.0	43.0	14.5	0.073
P6SMB11			9.90	12.1	1.0	8.92	5.0	38.0	16.2	0.075
P6SMB11A	11A	11C	10.5	11.6	1.0	9.40	5.0	40.0	15.6	0.075
P6SMB12			10.8	13.2	1.0	9.72	5.0	36.0	17.3	0.078
P6SMB12A	12A	12C	11.4	12.6	1.0	10.2	5.0	37.0	16.7	0.078
P6SMB13			11.7	14.3	1.0	10.5	5.0	33.0	19.0	0.081
P6SMB13A	13A	13C	12.4	13.7	1.0	11.1	5.0	34.0	18.2	0.081
P6SMB15			13.5	16.5	1.0	12.1	5.0	28.0	22.0	0.084
P6SMB15A	15A	15C	14.3	15.8	1.0	12.8	5.0	29.0	21.2	0.084
P6SMB16			14.4	17.6	1.0	12.9	5.0	26.0	23.5	0.086
P6SMB16A	16A	16C	15.2	16.8	1.0	13.6	5.0	28.0	22.5	0.086
P6SMB18			16.2	19.8	1.0	14.5	5.0	23.0	26.5	0.088
P6SMB18A	18A	18C	17.1	18.9	1.0	15.3	5.0	25.0	25.2	0.088
P6SMB20			18.0	22.0	1.0	16.2	5.0	21.0	29.1	0.090
P6SMB20A	20A	20C	19.0	21.0	1.0	17.1	5.0	22.0	27.7	0.090
P6SMB22			19.8	24.2	1.0	17.8	5.0	19.0	31.9	0.092
P6SMB22A	22A	22C	20.9	23.1	1.0	18.8	5.0	20.0	30.6	0.092
P6SMB24			21.6	26.4	1.0	19.4	5.0	18.0	34.7	0.094
P6SMB24A	24A	24C	22.8	25.2	1.0	20.5	5.0	19.0	33.2	0.094
P6SMB27			24.3	29.7	1.0	21.8	5.0	16.0	39.1	0.096
P6SMB27A	27A	27C	25.7	28.4	1.0	23.1	5.0	16.8	37.5	0.096
P6SMB30			27.0	33.0	1.0	24.3	5.0	14.0	43.5	0.097
P6SMB30A	30A	30C	28.5	31.5	1.0	25.6	5.0	15.0	41.4	0.097
P6SMB33			29.7	36.3	1.0	26.8	5.0	13.0	47.7	0.098
P6SMB33A	33A	33C	31.4	34.7	1.0	28.2	5.0	13.8	45.7	0.098
P6SMB36			32.4	39.6	1.0	29.1	5.0	12.0	52.0	0.099
P6SMB36A	36A	36C	34.2	37.8	1.0	30.8	5.0	12.6	49.9	0.099
P6SMB39			35.1	42.9	1.0	31.6	5.0	11.1	56.4	0.100
P6SMB39A	39A	39C	37.1	41.0	1.0	33.3	5.0	11.6	53.9	0.100
P6SMB43			38.7	47.3	1.0	34.8	5.0	10.0	61.9	0.101
P6SMB43A	43A	43C	40.9	45.2	1.0	36.8	5.0	10.6	59.3	0.101
P6SMB47			42.3	51.7	1.0	38.1	5.0	9.2	67.8	0.101

P6SMB Series

电特性 (测量环境温度为25°C, 除非另有规定)
ELECTRICAL CHARACTERISTICS (at TA=25 °C unless otherwise noted)

型号 TYPE	标识代码 Marking		击穿电压 BREAKDOWN VOLTAGE		测试电流 TEST CURRENT	变位电压 REVERSE STAND-OFF VOLTAGE	最大反向漏电流 REVERSE LEAKAGE	最大峰值脉冲电流 PEAK PULSE CURRENT	最大钳位电压 MAXIMUM CLAMPING VOLTAGE	击穿电压 最大温度系数 COEFFICIENT OF V _(BR)
	单向	双向	V _(BR) (注释 1)		I _T	V _{RM}	I ₀ @ V _{RM} (注释 2)	I _{ppm}	V _C @ I _{ppm}	
			V(最小 MIN)	V(最大 MAX)	mA	V	μA	A	V	% / °C
P6SMB47A	47A	47C	44.7	49.4	1.0	40.2	5.0	9.7	64.8	0.101
P6SMB51			45.9	56.1	1.0	41.3	5.0	8.5	73.5	0.102
P6SMB51A	51A	51C	48.5	53.6	1.0	43.6	5.0	8.9	70.1	0.102
P6SMB56			50.4	61.6	1.0	45.4	5.0	7.8	80.5	0.103
P6SMB56A	56A	56C	53.2	58.8	1.0	47.8	5.0	8.1	77.0	0.103
P6SMB58A	58A	58C	55.1	60.9	1.0	49.3	5.0	7.8	80.7	0.103
P6SMB62			55.8	68.2	1.0	50.2	5.0	7.0	89.0	0.104
P6SMB62A	62A	62C	58.9	65.1	1.0	53.0	5.0	7.4	85.0	0.104
P6SMB68			61.2	74.8	1.0	55.1	5.0	6.4	98.0	0.104
P6SMB68A	68A	68C	64.6	71.4	1.0	58.1	5.0	6.8	92.0	0.104
P6SMB75			67.5	82.5	1.0	60.7	5.0	5.8	108	0.105
P6SMB75A	75A	75C	71.3	78.8	1.0	64.1	5.0	6.1	103	0.105
P6SMB82			73.8	90.2	1.0	66.4	5.0	5.3	118	0.105
P6SMB82A	82A	82C	77.9	86.1	1.0	70.1	5.0	5.5	113	0.105
P6SMB91			81.9	100	1.0	73.7	5.0	4.8	131	0.106
P6SMB91A	91A	91C	86.5	95.5	1.0	77.8	5.0	5.0	125	0.106
P6SMB100			90.0	110	1.0	81.0	5.0	4.3	144	0.106
P6SMB100A	100A	100C	95.0	105	1.0	85.5	5.0	4.5	137	0.106
P6SMB110			99.0	121	1.0	89.2	5.0	3.9	158	0.107
P6SMB110A	110A	110C	105	116	1.0	94.0	5.0	4.1	152	0.107
P6SMB120			108	132	1.0	97.2	5.0	3.6	173	0.107
P6SMB120A	120A	120C	114	126	1.0	102	5.0	3.8	165	0.107
P6SMB130			117	143	1.0	105	5.0	3.3	187	0.107
P6SMB130A	130A	130C	124	137	1.0	111	5.0	3.5	179	0.107
P6SMB150			135	165	1.0	121	5.0	2.9	215	0.108
P6SMB150A	150A	150C	143	158	1.0	128	5.0	3.0	207	0.108
P6SMB160			144	176	1.0	130	5.0	2.7	230	0.108
P6SMB160A	160A	160C	152	168	1.0	136	5.0	2.8	219	0.108
P6SMB170			153	187	1.0	138	5.0	2.5	244	0.108
P6SMB170A	170A	170C	162	179	1.0	145	5.0	2.6	234	0.108
P6SMB180			162	198	1.0	146	5.0	2.4	258	0.108
P6SMB180A	180A	180C	171	189	1.0	154	5.0	2.5	246	0.108
P6SMB200			180	220	1.0	162	5.0	2.1	287	0.108
P6SMB200A	200A	200C	190	210	1.0	171	5.0	2.2	274	0.108

?w dY.

1. V ä BR ä"È)-8L%/ IT 300 6 &*?Úd? IT É8H?q4¥MØ7xI S~\$A?q1ñ í
2. .!&[* è VRWM). 10V &Y10V !t s è ID "È%/"œ í
3.)&* &†&œL.&*?w9°C 4¥CA èZ÷KÉ&[* èGÄ>£E 2!b'G-! ³18H& í

RATINGS AND CHARACTERISTIC CURVES

FIG. 1 - PEAK PULSE POWER RATING CURVE

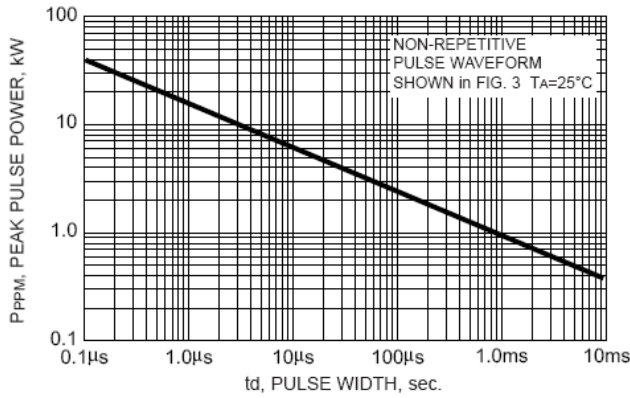


FIG. 2 - PULSE DERATING CURVE

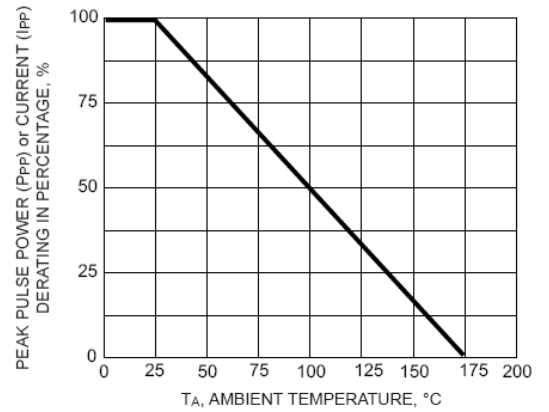


FIG. 3 - PULSE WAVEFORM

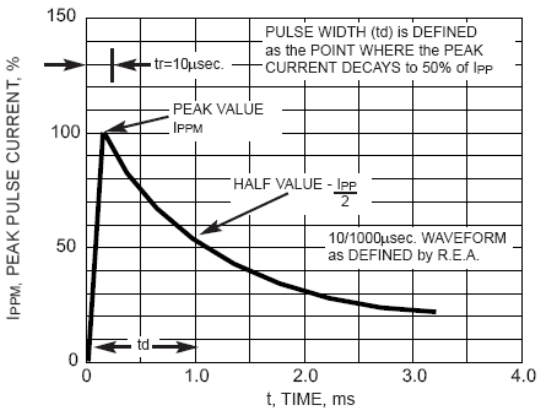


FIG. 4 - TYPICAL JUNCTION CAPACITANCE UNIDIRECTIONAL

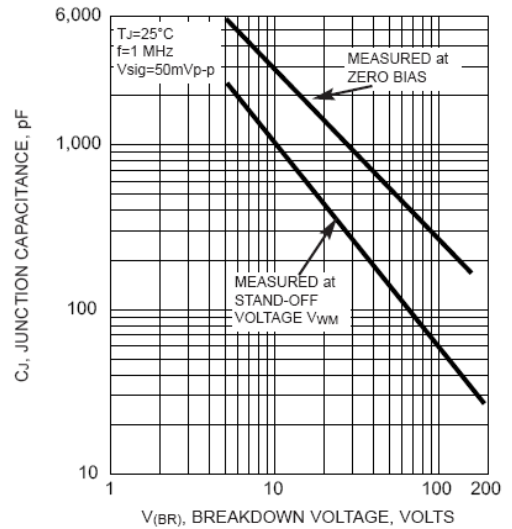


FIG. 5 - STEADY STATE POWER DERATING CURVE

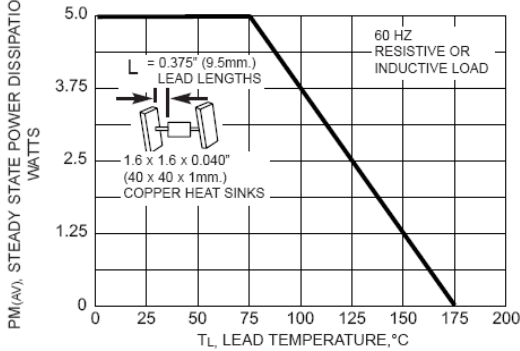


FIG. 6 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT UNI-DIRECTIONAL

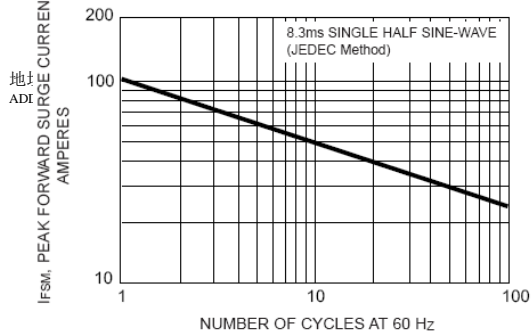


FIG. 7 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS

