

P6SMBF Series

Rev.B Apr.-2025

5 é / Descriptions

n μ É x 9 Á 9 ò ~ ä y = F g ~ ... 9 y 6.8V~550V k SMBF / xož

Surface mount transient voltage suppressor power 600 watts, Stand-Off Voltage y 6.8V~550V ,SMBF package.

α^a / Features

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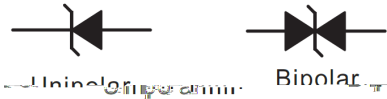
Glass passivated junction, Low inductance, For surface mounted applications, HF Product.

Đ ÷ / Applications

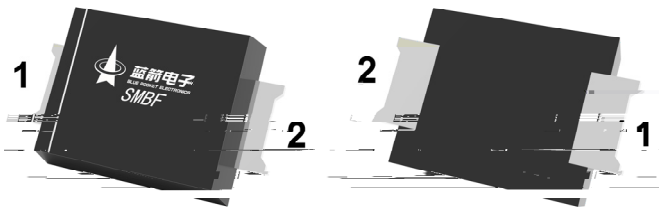
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General purpose.

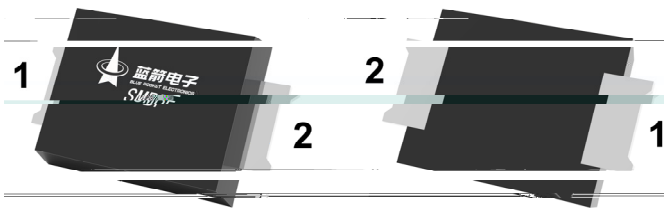
Ã W] Ô · / Equivalent Circuit



• Ū - æ / Pinning



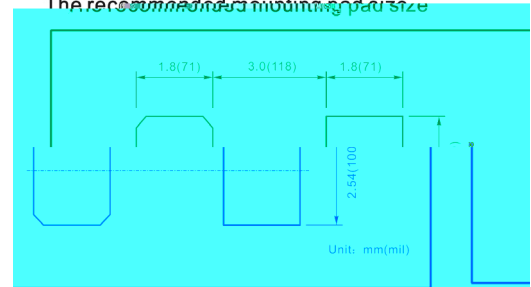
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PIN	DESCRIPTION
1	Cathode
2	Anode

The recommended mounting pad size



, M V / Marking

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See Marking Instructions.

@ f Parameter	... Z Symbol	f › Rating	% y Unit
Peak Pulse Power Dissipation on 10/1000 us waveform (Note1,Note2, Fig.1).	P _{PPM}	600	W
Peak Forward Surge Current,8.3ms Single Half Sine-Wave Superimposed on Rated Load, (JEDEC Method) (Note 3, Fig4).	I _{FSM} (UNI)	100	A
Peak Pulse Current on 10/1000 us waveform (Note 1, Fig 3)	I _{PPM}	see Table 1	A
Typical Junction capacitance at VR=4V, f=1MHz	C _J	390	pF

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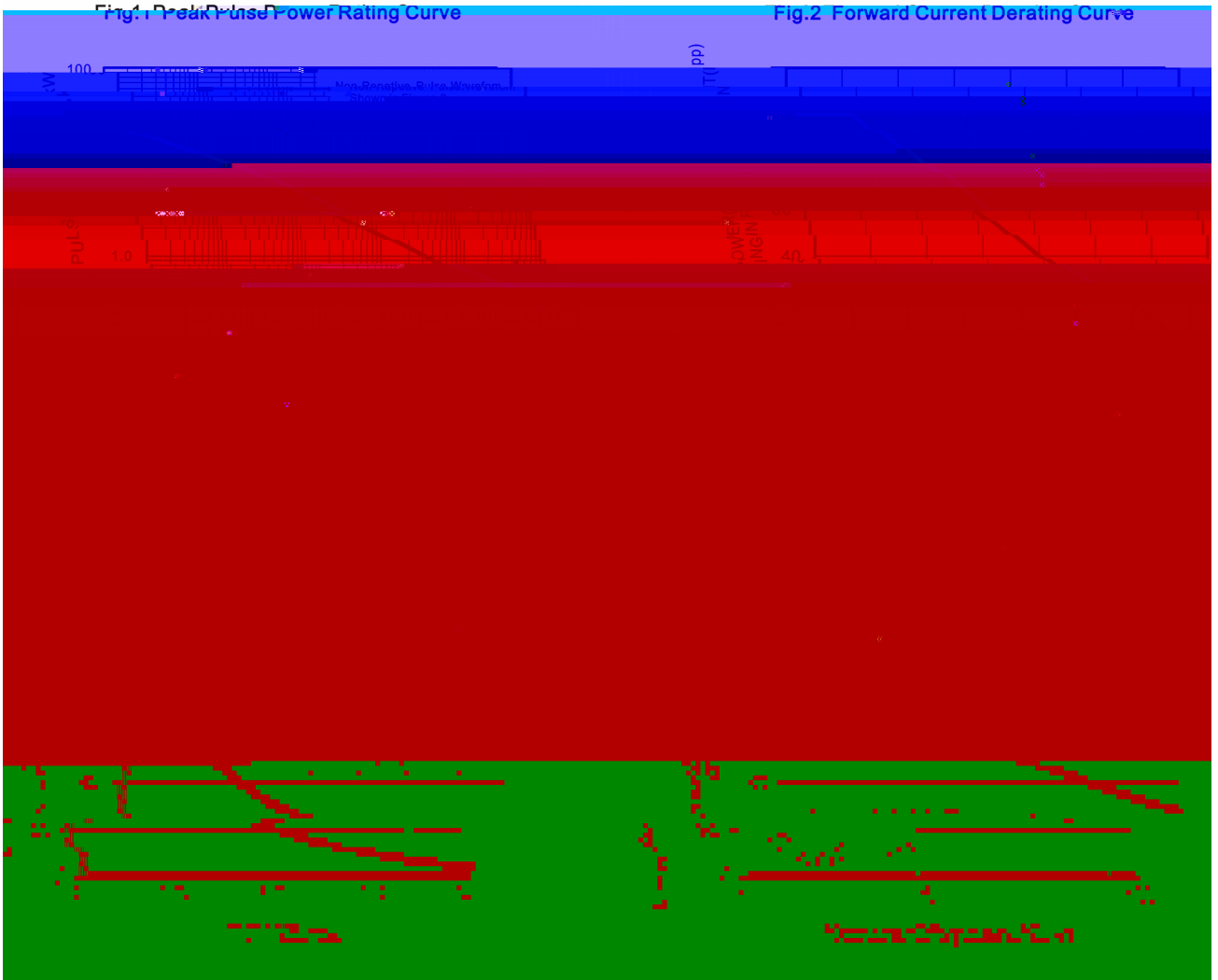
DATA SHEET

Type		Reverse Stand-off Voltage	Breakdown Voltage		Test Current	Maximum Reverse Leakage	Max. Clamp Voltage	Peak Pulse Current	Package	
			V _{BR} @ I _T						SMBF	
		V _{RRM}	Min	Max	I _T	V _C @ I _{PP}	I _{PP}	Device Marking Ccode	UNI	BI
UNI	BI	V	V	V	mA	uA	V	A	UNI	BI
P6SMBF6.8A	P6SMBF6.8CA	5.8	6.45	7.14	10	1000	10.5	58.1	6V8A	6V8C
P6SMBF7.5A	P6SMBF7.5CA	6.4	7.13	7.88	10	500	11.3	54	7V5A	7V5C
P6SMBF8.2A	P6SMBF8.2CA	7.02	7.79	8.61	10	200	12.1	50.4	8V2A	8V2C
P6SMBF9.1A	P6SMBF9.1CA	7.78	8.65	9.55	1	50	13.4	45.5	9V1A	9V1C
P6SMBF10A	P6SMBF10CA	8.55	9.5	10.5	1	10	14.5	42.1	10A	10C
P6SMBF11A	P6SMBF11CA	9.4	10.5	11.6	1	5	15.6	39.1	11A	11C
P6SMBF12A	P6SMBF12CA	10.2	11.4	12.6	1	5	16.7	36.5	12A	12C
P6SMBF13A	P6SMBF13CA	11.1	12.4	13.7	1	1	18.2	33.5	13A	13C
P6SMBF15A	P6SMBF15CA	12.8	14.3	15.8	1	1	21.2	28.8	15A	15C
P6SMBF16A	P6SMBF16CA	13.6	15.2	16.8	1	1	22.5	27.1	16A	16C
P6SMBF18A	P6SMBF18CA	15.3	17.1	18.9	1	1	25.5	24.2	18A	18C
P6SMBF20A	P6SMBF20CA	17.1	19	21	1	1	27.7	22	20A	20C
P6SMBF22A	P6SMBF22CA	18.8	20.9	23.1	1	1	30.6	19.9	22A	22C
P6SMBF24A	P6SMBF24CA	20.5	22.8	25.2	1	1	33.2	18.4	24A	24C
P6SMBF27A	P6SMBF27CA	23.1	25.7	28.4	1	1	37.5	16.3	27A	27C
P6SMBF30A	P6SMBF30CA	25.6	28.5	31.5	1	1	41.4	14.7	30A	30C
P6SMBF33A	P6SMBF33CA	28.2	31.4	34.7	1	1	45.7	13.3	33A	33C
P6SMBF36A	P6SMBF36CA	30.8	34.2	37.8	1	1	49.9	12.2	36A	36C
P6SMBF39A	P6SMBF39CA									

Type

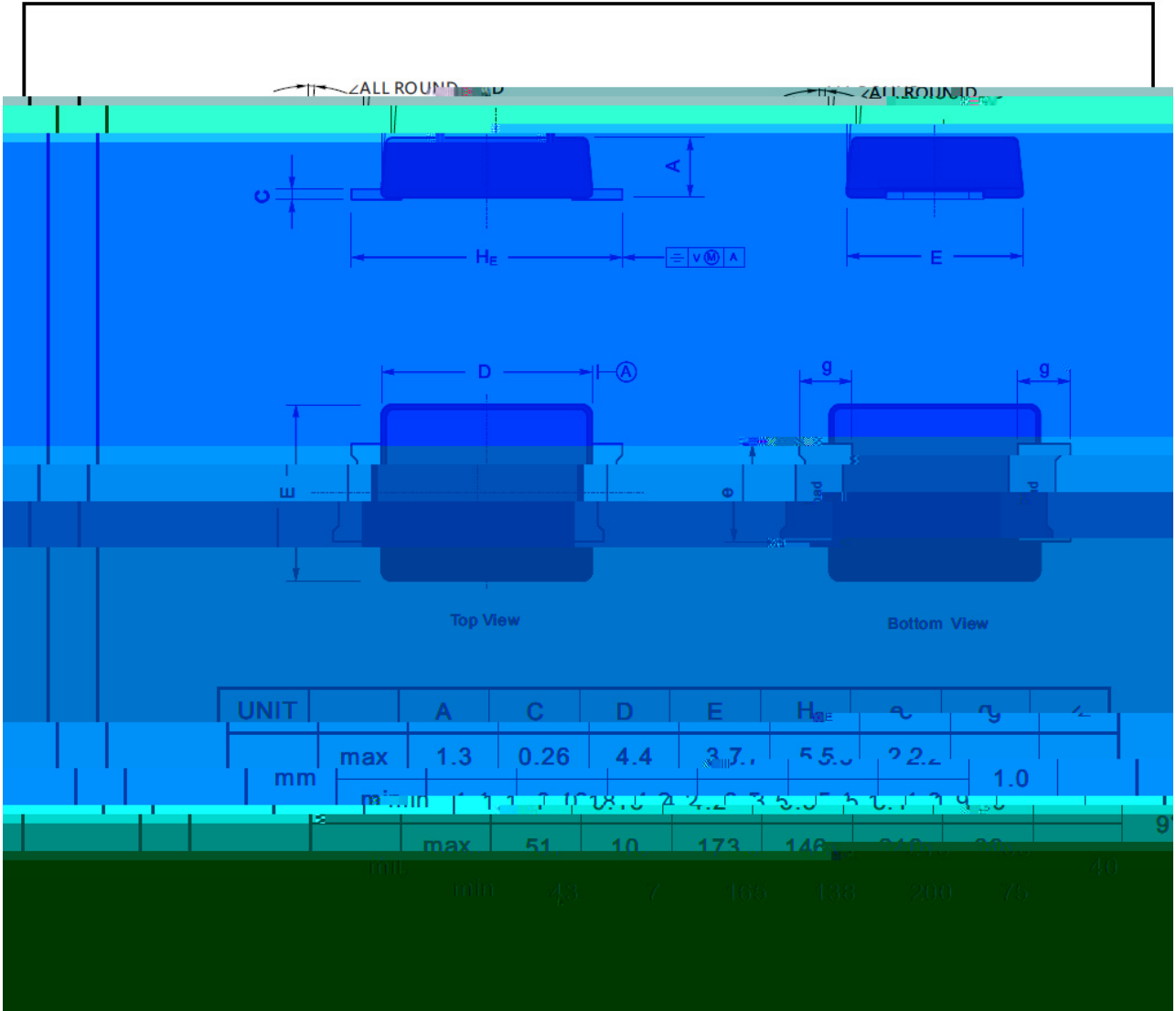
Reverse
Stand-off

Electrical Characteristic Curve



∅ □ =) φ / Package Dimensions

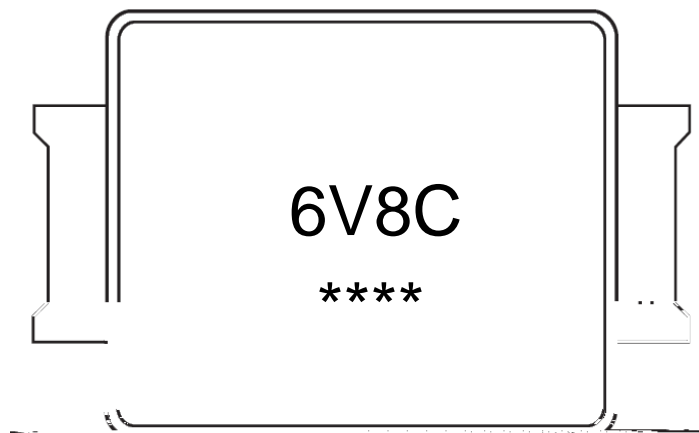
SMBF



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, M y f / Marking Instructions

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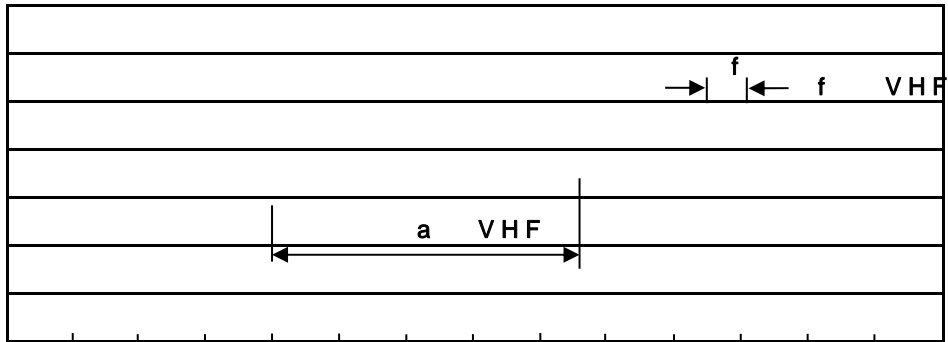


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<) y ° Z W A
**** y ÿ D Z W A k š ÿ D Z J

Note:

<) y Product Type Code
**** y Lot No. Code, code change with Lot No

šWD t...•Žϕ (x/) / :KSVKXGZ[XK 6XULORK LUX /8 8KLRU] 9URJKXOTM 6



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1o• Ä ½ “ † 150 ½180 - k ž • 60 ½90sec;

2o• Q › “ † 245 r5 - k ž • 4 Ò 5 r0.5sec;

3o•D N ò i Ò 0 , † 2 ½10 - /sec.

Note:

1.Preheating:150~180 - , Time:60~90sec.

2.Peak Temp.:245 r5 - , Duration:5 r0.5sec.

3. Cooling Speed: 2~10 - /sec.

ÂD /Cã p ~ »] / Resistance to Soldering Heat Test Conditions

“ † y 260 r5 -

ž • y 10 r1 sec.

Temp.:260±5

Time:10±1 sec

G P á / Packaging SPEC.

2 & x / REEL

Package Type 7>û ~ E	Units ;>û !H					Dimension ;>û p . (unit Åmm³)		
	Units/Reel /--	Reels/Inner Box -- /-	Units/Inner Box /-	Inner Boxes/Outer Box - /1ç	Units/Outer Box /1ç	Reel	Inner Box	Outer Boxç
SMBF	5,000	2	10,000	7	70,000	13 s ×12	336X336X40	380X335X366

„Đ y f / Notices