

**SURFACE MOUNT  
UNIDIRECTIONAL AND BIDIRECTIONAL  
TRANSIENT VOLTAGE SUPPRESSORS**

STAND-OFF VOLTAGE – **6.8 to 82 Volts**  
POWER DISSIPATION - **600 WATTS**

**FEATURES**

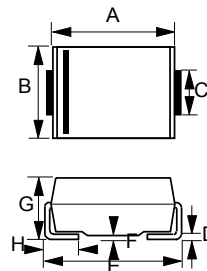


- For surface mounted applications
- Reliable low cost construction utilizing molded plastic technique
- Typical IR less than 1uA above 10V
- Fast response time: typically less than 1.0ns for Uni-direction,less than 5.0ns for Bi-direction,form 0 Volts to BV min
- RoHS compliant
- AEC-Q101 qualified
- PPAP capable
- Automotive grade

**MECHANICAL DATA**

- Case : Molded plastic
- Case Material: Molding compound, UL Flammability classification 94V-0, (No Br. Sb. Cl.) "Halogen-free".
- Polarity : by cathode band denotes uni-directional device none cathode band denotes bi-directional device
- Weight : 0.003 ounces, 0.093 gram

**SMB**



SMB		
DIM.	MIN.	MAX.
A	4.06	4.57
B	3.30	3.94
C	1.96	2.21
D	0.15	0.31
E	5.21	5.59
F	0.05	0.20
G	2.01	2.50
H	0.76	1.52

All Dimensions in millimeter

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

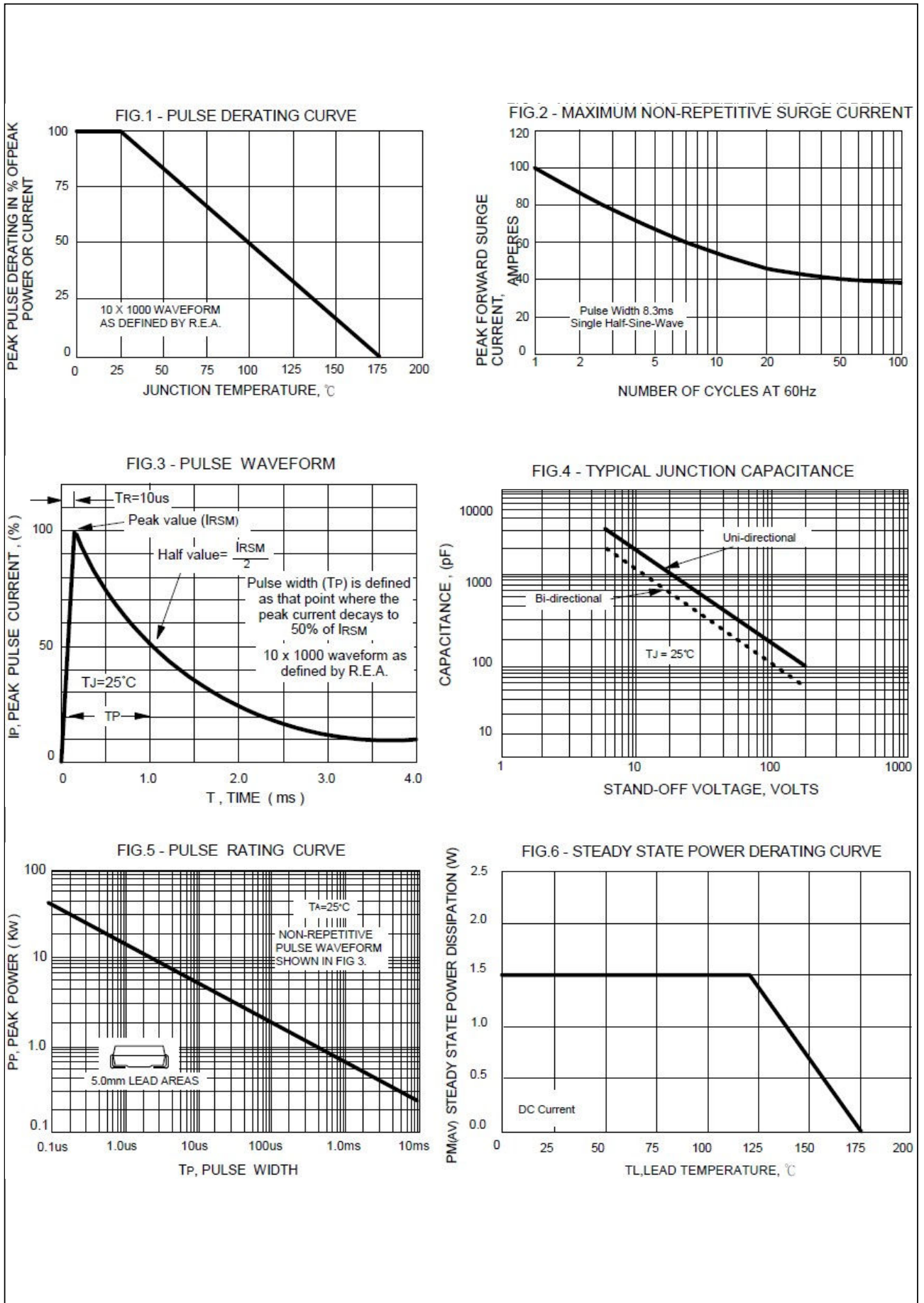
Ratings at 25°C ambient temperature unless otherwise specified.

Characteristic	Symbol	VALUE	Units
PEAK POWER DISSIPATION AT TA = 25 C, TP = 1ms (Note 1)	PPK	600	WATTS
Peak Forward Surge Current 8.3ms single half sine-wave @ TJ =25 C,(Note 2)	IFSM	90	AMPS
Steady State Power Dissipation, with PCB	PM(AV)	1.5	WATTS
Maximum Instantaneous forward voltage at 16A (Note2, 3)	VF	2.5	Volts
Typical Thermal Resistance	Rθ JA	90	°C/W
	Rθ JC	25	
Operating Temperature Range	TJ	-55 to +175	°C
Storage Temperature Range	TSTG	-55 to +175	°C

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- NOTES : 1. Non-repetitive current pulse, per fig. 3 and derated above TJ= 25 °C per fig.1.  
2. Only for unidirectional units.  
3. VF max=2.5V on APSMBJ6.8A thru APSMBJ82A devices.

Please be aware that an **Important Notice and Disclaimer** concerning availability, disclaimers, and use in critical applications of LSC products thereto appears at the end of this Data Sheet.



Device Uni- Directional	Device Bi- Directional	Device Marking Code		Reverse Standoff Voltage  VR (V)	Breakdown Voltage VBR Volts			Max. Clamping Voltage @Ipp  VC (V)	Max. Peak Pulse Current  IPP (A)	Max. Reverse Leakage @ VR  IR (uA)
		(UNI)	(BI)		Min.	Max.	@It (mA)			
APSMBJ6.8A	APSMBJ6.8CA	A6V8A	A6V8C	5.8	6.45	7.13	10	10.5	57.1	1000
APSMBJ7.5A	APSMBJ7.5CA	A7V5A	A7V5C	6.4	7.13	7.88	10	11.3	53.1	500
APSMBJ8.2A	APSMBJ8.2CA	A8V2A	A8V2C	7.0	7.79	8.61	10	12.1	49.6	200
APSMBJ9.1A	APSMBJ9.1CA	A9V1A	A9V1C	7.8	8.65	9.56	1.0	13.4	44.8	50
APSMBJ10A	APSMBJ10CA	A10A	A10C	8.6	9.50	10.50	1.0	14.5	41.4	10
APSMBJ11A	APSMBJ11CA	A11A	A11C	9.4	10.5	11.6	1.0	15.6	38.5	5.0
APSMBJ12A	APSMBJ12CA	A12A	A12C	10.2	11.4	12.6	1.0	16.7	35.9	0.5
APSMBJ13A	APSMBJ13CA	A13A	A13C	11.1	12.4	13.7	1.0	18.2	33.0	0.5
APSMBJ15A	APSMBJ15CA	A15A	A15C	12.8	14.3	15.8	1.0	21.2	28.3	0.5
APSMBJ16A	APSMBJ16CA	A16A	A16C	13.6	15.2	16.8	1.0	22.5	26.7	0.5
APSMBJ18A	APSMBJ18CA	A18A	A18C	15.3	17.1	18.9	1.0	25.2	23.8	0.5
APSMBJ20A	APSMBJ20CA	A20A	A20C	17.1	19.0	21.0	1.0	27.7	21.7	0.5
APSMBJ22A	APSMBJ22CA	A22A	A22C	18.8	20.9	23.1	1.0	30.6	19.6	0.5
APSMBJ24A	APSMBJ24CA	A24A	A24C	20.5	22.8	25.2	1.0	33.2	18.1	0.5
APSMBJ27A	APSMBJ27CA	A27A	A27C	23.1	25.7	28.4	1.0	37.5	16.0	0.5
APSMBJ30A	APSMBJ30CA	A30A	A30C	25.6	28.5	31.5	1.0	41.4	14.5	0.5
APSMBJ33A	APSMBJ33CA	A33A	A33C	28.2	31.4	34.7	1.0	45.7	13.1	0.5
APSMBJ33A	APSMBJ33CAC	A33A	A33CC	28.2	31.4	34.7	1.0	45.7	13.1	0.5
APSMBJ36A	APSMBJ36CA	A36A	A36C	30.8	34.2	37.8	1.0	49.9	12.0	0.5
APSMBJ39A	APSMBJ39CA	A39A	A39C	33.3	37.1	41.0	1.0	53.9	11.1	0.5
APSMBJ43A	APSMBJ43CA	A43A	A43C	36.8	40.9	45.2	1.0	59.3	10.1	0.5
APSMBJ47A	APSMBJ47CA	A47A	A47C	40.2	44.7	49.4	1.0	64.8	9.3	0.5
APSMBJ51A	APSMBJ51CA	A51A	A51C	43.6	48.5	53.6	1.0	70.1	8.6	0.5
APSMBJ56A	APSMBJ56CA	A56A	A56C	47.8	53.2	58.8	1.0	77.0	7.8	0.5
APSMBJ62A	APSMBJ62CA	A62A	A62C	53.0	58.9	65.1	1.0	85.0	7.1	0.5
APSMBJ68A	APSMBJ68CA	A68A	A68C	58.1	64.6	71.4	1.0	92.0	6.5	0.5
APSMBJ75A	APSMBJ75CA	A75A	A75C	64.7	71.3	78.8	1.0	103.0	5.8	0.5
APSMBJ82A	APSMBJ82CA	A82A	A82C	70.1	77.9	86.1	1.0	113.0	5.3	0.5

**NOTE :**

- Suffix 'A ' denotes 5% tolerance device.
- 1) Add suffix 'C 'or ' CA ' after part number to specify Bi-directional devices.
- 2) The IR limit is double for Bi-Directional devices.
- 3) APSMBJ33CA for special customer used.

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