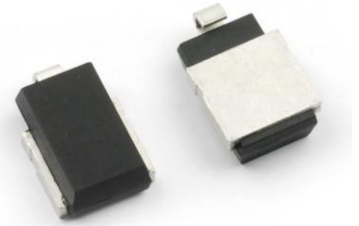


SMD Type 6600 W

■ Features

1. 6600W peak pulse power capability with a 10/1000 μ s waveform, repetitive rate (duty cycle): 0.01%
2. High surge capability
3. Low leakage current
4. Low forward voltage drop
5. Excellent clamping capability
6. Very fast response time
7. Halogen free and RoHS compliant
8. Meet ISO7637-2 5a/5b and ISO16750 load dump test (varied by test condition)
9. AEC-Q101 qualified
10. ESD protection of data lines in accordance with IEC 61000-4-2,30kV(Air),30kV(Contact)



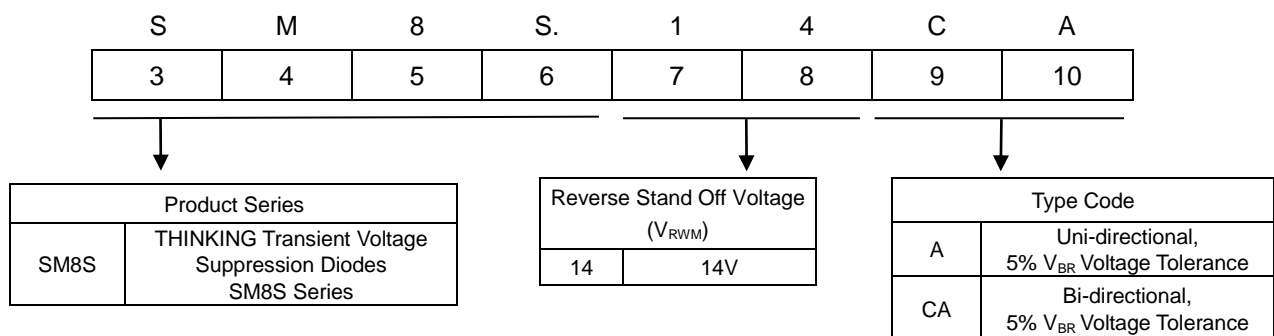
■ Recommended Applications

1. Telecommunication
2. Computer
3. Industrial device
4. Consumer electronic device
5. Automotive

■ Mechanical Data

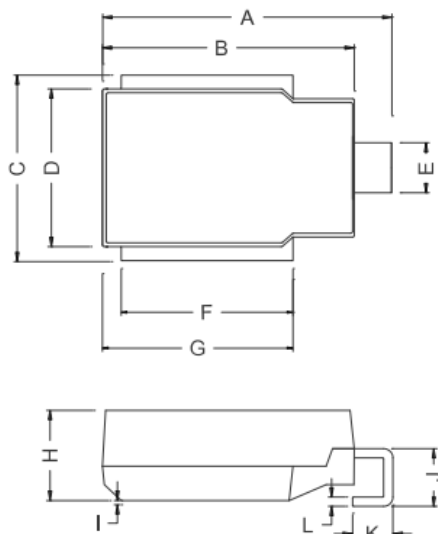
1. Case: Molded plastic, DO-218AB
2. Epoxy: UL 94V-0 rate flame retardant
3. Polarity: Heatsink is anode

■ Part Number Code

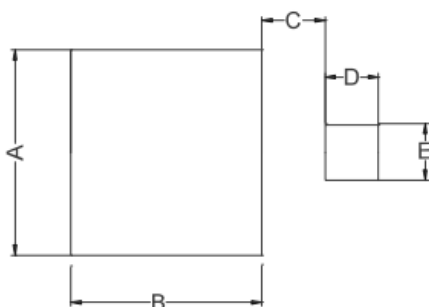


SMD Type 6600 W

Structures and Dimensions



DO-218AB		
Dimensions	Millimeters	
	Min	Max
A	15.00	16.00
B	13.30	13.70
C	9.50	10.50
D	8.30	8.70
E	2.40	3.00
F	8.70	9.50
G	9.70	10.50
H	4.70	5.20
I	0.00	0.20
J	2.50	3.50
K	1.50	2.80
L	0.50	0.70



DO-218AB		
Dimensions	Millimeters	
	Min	Max
A	9.50	10.50
B	9.00	9.60
C	2.80	3.40
D	2.30	2.90
E	2.40	3.00

Maximum Rating ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak pulse power dissipation at $T_A=25^{\circ}\text{C}$ by 10/1000 μs waveform	P_{PPM}	6600	W
Peak forward surge current, 8.3 ms single half sine-wave (Note 1)	I_{FSM}	700	A
Power dissipation on infinite heatsink at $T_C=25^{\circ}\text{C}$	PD	8.0	W
Maximum instantaneous forward voltage at 100A for unidirectional only	VF	1.8	V
Operating junction and storage temperature range	T_J, T_{STG}	-55~+175	$^{\circ}\text{C}$

Note: 1. Measured on 8.3ms single half sine wave or equivalent square wave for unidirectional device only, duty cycle=4 per minute maximum

Transient Voltage Suppression Diodes:SM8S Series



SMD Type 6600 W

■ Electrical Characteristics (T_A=25°C unless otherwise noted)

Part No. (Uni)	Part No. (Bi)	Reverse Stand off Voltage	Breakage Voltage VBR @ IT		Test Current IT(mA)	Maximum Clamping Voltage VC @ Ipp	Maximum Peak Pulse Current Ipp(A)	Maximum Reverse Leakage IR @VRWM	Marking Code	
			VRWM (V)	Min(V)					Max(V)	Uni
SM8S10A		10	11.1	12.3	5	17	388	15	SM8S10A	
SM8S11A		11	12.2	13.5	5	18.2	363	10	SM8S11A	
SM8S12A		12	13.3	14.7	5	19.9	332	10	SM8S12A	
SM8S13A		13	14.4	15.9	5	21.5	307	10	SM8S13A	
SM8S14A	SM8S14CA	14	15.6	17.2	5	23.2	284	10	SM8S14A	SM8S14CA
SM8S15A	SM8S15CA	15	16.7	18.5	5	24.4	270	10	SM8S15A	SM8S15CA
SM8S16A	SM8S16CA	16	17.8	19.7	5	26	254	10	SM8S16A	SM8S16CA
SM8S17A	SM8S17CA	17	18.9	20.9	5	27.6	239	10	SM8S17A	SM8S17CA
SM8S18A	SM8S18CA	18	20	22.1	5	29.2	226	10	SM8S18A	SM8S18CA
SM8S20A	SM8S20CA	20	22.2	24.5	5	32.4	204	10	SM8S20A	SM8S20CA
SM8S22A	SM8S22CA	22	24.4	26.9	5	35.5	186	10	SM8S22A	SM8S22CA
SM8S24A	SM8S24CA	24	26.7	29.5	5	38.9	170	10	SM8S24A	SM8S24CA
SM8S26A	SM8S26CA	26	28.9	31.9	5	42.1	157	10	SM8S26A	SM8S26CA
SM8S28A	SM8S28CA	28	31.1	34.4	5	45.4	145	10	SM8S28A	SM8S28CA
SM8S30A	SM8S30CA	30	33.3	36.8	5	48.4	136	10	SM8S30A	SM8S30CA
SM8S33A	SM8S33CA	33	36.7	40.6	5	53.3	124	10	SM8S33A	SM8S33CA
SM8S36A	SM8S36CA	36	40	44.2	5	58.1	114	10	SM8S36A	SM8S36CA
SM8S40A	SM8S40CA	40	44.4	49.1	5	64.5	102	10	SM8S40A	SM8S40CA
SM8S43A	SM8S43CA	43	47.8	52.8	5	69.4	95.1	10	SM8S43A	SM8S43CA
SM8S48A		48	53.3	58.9	5	77.4	85.3	10	SM8S48A	
SM8S58A		58	64.4	71.2	5	93.6	70.5	10	SM8S58A	
SM8S64A		64	71.1	78.6	5	103	64.1	10	SM8S64A	

SMD Type 6600 W

■ Rate and Characteristic Curve ($T_A=25^\circ\text{C}$ unless otherwise noted)

Fig.1 - Pulse Derating Curve

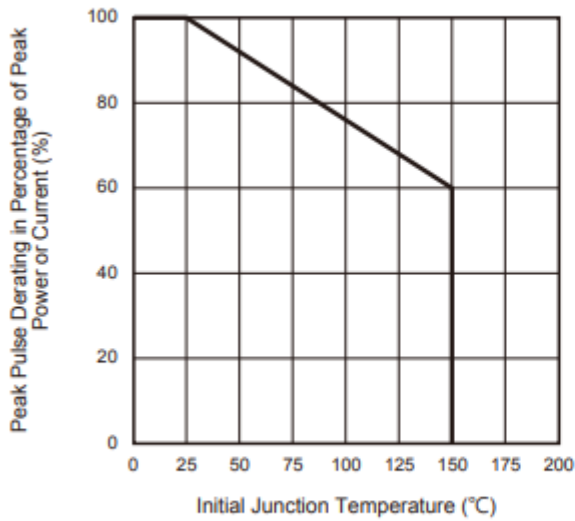


Fig.2 - Pulse Waveform

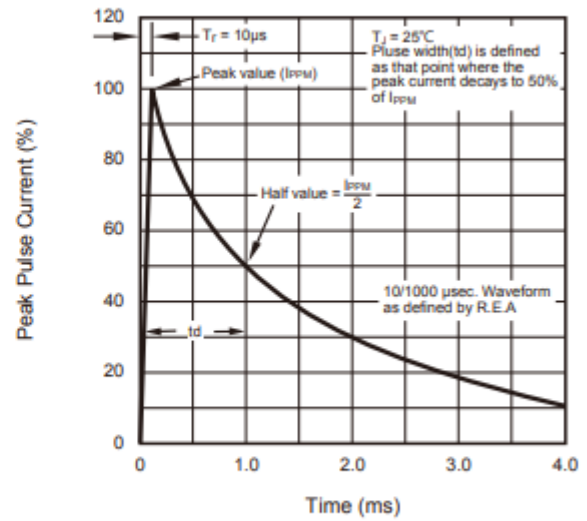


Fig.3 - Steady State Power Derating Curve

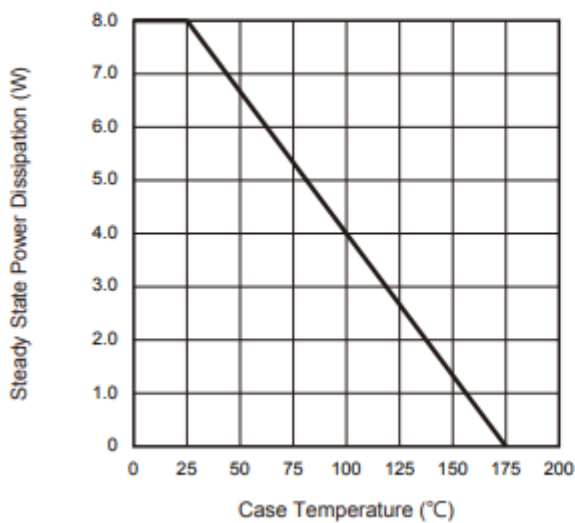
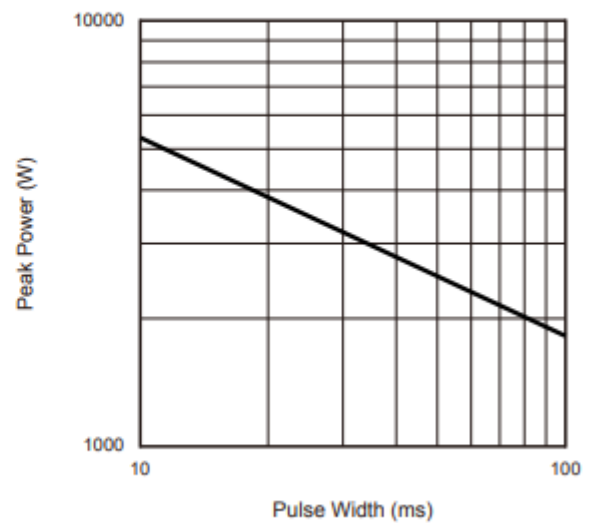
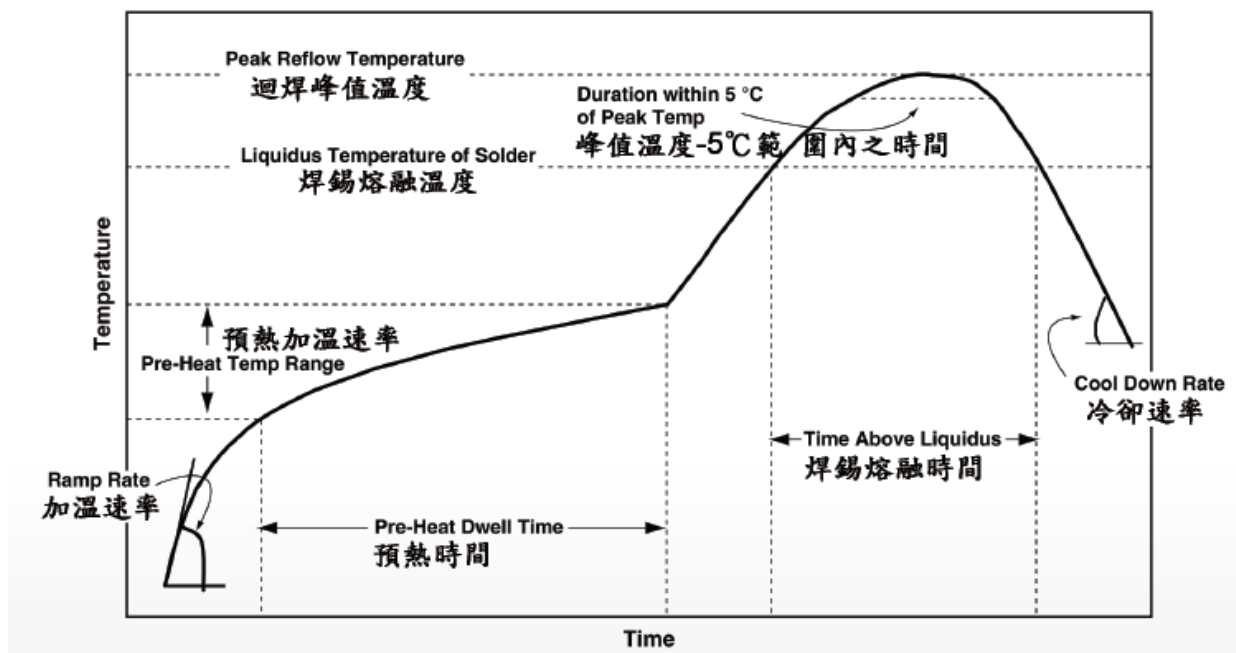


Fig.4 - Peak Pulse Power Rating Curve



SMD Type 6600 W

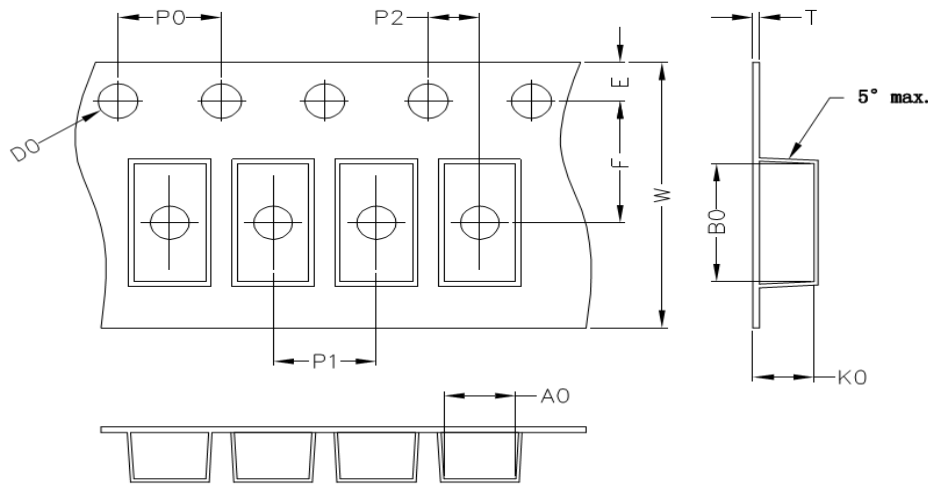
IR-reflow soldering profile



LEAD(Pb)-FREE SOLDER(SnAgCu) REFLOW PROFILE ATTRIBUTES	
PROFILE ATTRIBUTE	PROFILE ATTRIBUTE
Peak Reflow Temperature	260(+8/-8)°C
Time within 5°C of Peak Temperature	30s max
Liquidus Temperature of Solder	217°C
Cool Down Rate	6 °C/s max
Time above Liquidus	60s to 150s
Pre-heat Temperature Range	150°C to 200°C
Pre-heat Dwell Time	60s to 120s
Maximum Ramp Rate	3 °C/s max

SMD Type 6600 W

■ Packaging



(Unit : mm)

Index	A0	B0	K0	D0	E	F	P0	P1	P2	T	W
SM8S	10.6	15.9	5.85	1.5	1.75	11.5	4	16	2	0.35	24

■ Quantity

MPQ: 750pcs

Series Type	Reel size (inch)	Quantity (pcs/reel)
SM8S	13"	750

■ Warehouse Storage Conditions of product

- Storage Condition:
 1. Storage Temperature: 15~30°C
 2. Relative Humidity: ≤75%RH
 3. Keep away from corrosive atmosphere and sunlight.
- Period of Storage: 1 year.