

## Features

- Glass passivated junction
- 6600W peak pulse power(10/1000us)
- Low clamping voltage
- Low Leakage current
- Fast response time



DO-218AB

## Mechanical Data

**Case:** DO-218AB(plastic package)

**Molding Compound Flammability Rating:**UL 94 V-0

**Terminals:** High temperature soldering guaranteed:260 °C/10 sec. at terminals



**RoHS**  
COMPLIANT

## Absolute Maximum Ratings (T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power Dissipation With a 10/1000us Waveform <sup>1</sup>	P <sub>PP</sub>	6600	W
Maximum Peak Reverse Pulse Current a 10/1000us Waveform <sup>1</sup>	I <sub>PP</sub>	See Next Table	A
Peak Forward Surge Current 8.3ms Single Half Sine-wave <sup>2</sup>	I <sub>FSM</sub>	700	A
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

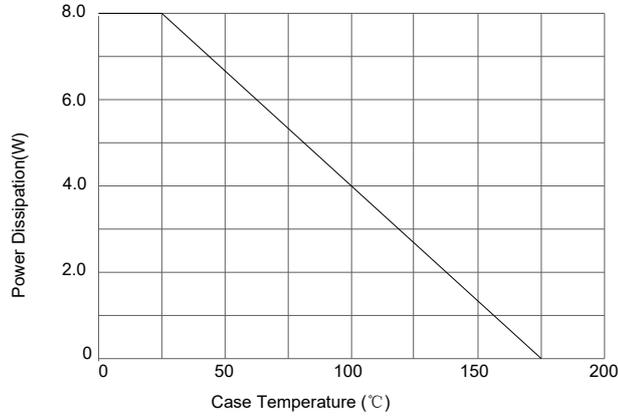
Note: 1.Non-repetitive current pulse,per Fig.5 and detailed above T<sub>A</sub>=25°C per Fig.1

2. Measured on 8.3ms single half sine-wave,or equivalent square wave,duty cycle=4 pulses per minute maximum

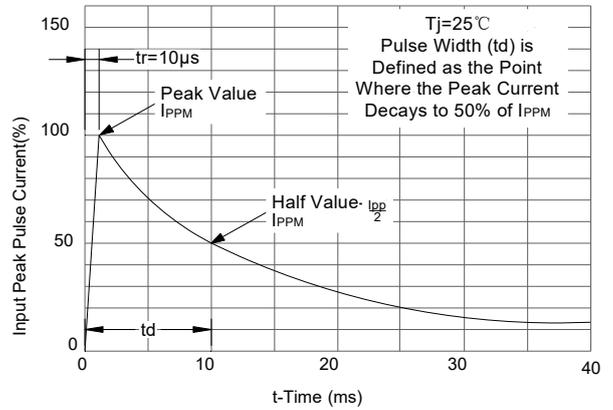
## Electrical Characteristics ( $T_A=25^\circ\text{C}$ unless otherwise specified)

Part Number (Uni)	Part Number (Bi)	Maximum Working Voltage	Maximum Reverse Current@ $V_{RWM}$	Breakdown Voltage @ $I_T=5.0\text{mA}$			Peak Surge Current	Maximum Clamping Voltage @ $I_{PP}$
				$V_{BR}$	$V_{BR}$	$I_T(\text{mA})$		
				$V_{RWM}(\text{V})$	$I_R \text{ Max}(\mu\text{A})$			
GSM8S10A	GSM8S10CA	10	15	11.1	12.8	5	388	17
GSM8S11A	GSM8S11CA	11	10	12.2	14	5	363	18.2
GSM8S12A	GSM8S12CA	12	10	13.3	15.3	5	332	19.9
GSM8S13A	GSM8S13CA	13	10	14.4	16.5	5	307	21.5
GSM8S14A	GSM8S14CA	14	10	15.6	17.9	5	284	23.2
GSM8S15A	GSM8S15CA	15	10	16.7	19.2	5	270	24.4
GSM8S16A	GSM8S16CA	16	10	17.8	20.5	5	254	26
GSM8S17A	GSM8S17CA	17	10	18.9	21.7	5	239	27.6
GSM8S18A	GSM8S18CA	18	10	20	23.3	5	226	29.2
GSM8S20A	GSM8S20CA	20	10	22.2	25.5	5	204	32.4
GSM8S22A	GSM8S22CA	22	10	24.4	28	5	186	35.5
GSM8S24A	GSM8S24CA	24	10	26.7	30.7	5	170	38.9
GSM8S26A	GSM8S26CA	26	10	28.9	33.2	5	157	42.1
GSM8S28A	GSM8S28CA	28	10	31.1	35.8	5	145	45.4
GSM8S30A	GSM8S30CA	30	10	33.3	38.3	5	136	48.4
GSM8S33A	GSM8S33CA	33	10	36.7	42.2	5	124	53.3
GSM8S36A	GSM8S36CA	36	10	40	46	5	114	58.1
GSM8S40A	GSM8S40CA	40	10	44.4	51.1	5	102	64.5
GSM8S43A	GSM8S43CA	43	10	47.8	52.8	5	95.1	69.4
GSM8S45A	GSM8S45CA	45	10	50	55.3	5	90.8	72.7
GSM8S48A	GSM8S48CA	48	10	53.3	58.9	5	85.3	77.4
GSM8S51A	GSM8S51CA	51	10	56.7	62.7	5	80.1	82.4
GSM8S54A	GSM8S54CA	54	10	60	66.3	5	75.8	87.1
GSM8S58A	GSM8S58CA	58	10	64.4	71.2	5	70.5	93.6
GSM8S60A	GSM8S60CA	60	10	66.7	73.7	5	68.1	96.8
GSM8S64A	GSM8S64CA	64	10	71.1	78.6	5	64.1	103
GSM8S70A	GSM8S70CA	70	10	77.8	86	5	58.4	113
GSM8S75A	GSM8S75CA	75	10	83	92.1	5	54.5	121
GSM8S78A	GSM8S78CA	78	10	86	95.8	5	52.4	126
GSM8S85A	GSM8S85CA	85	10	94	104	5	48.2	137

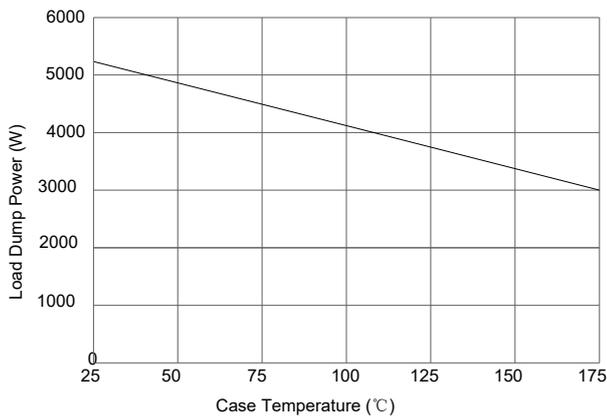
## Typical Electrical and Thermal Characteristic Curves



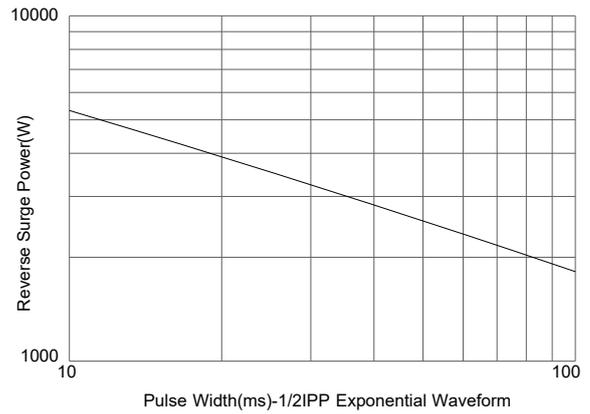
**Figure 1. Pulse Derating Curve**



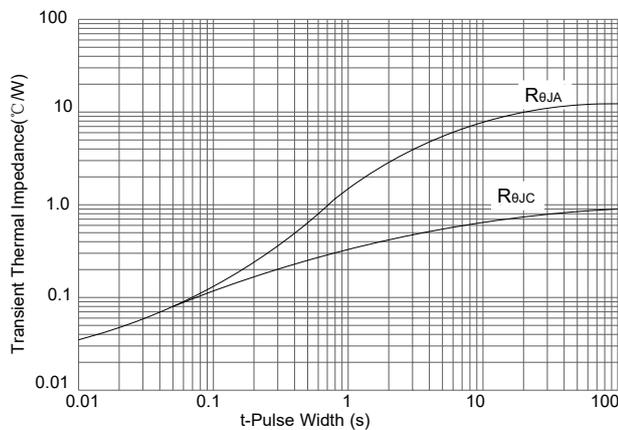
**Figure 2. Pulse Waveform**



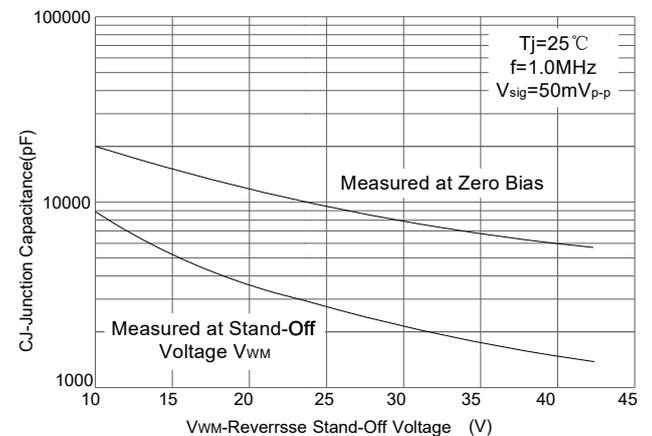
**Figure 3. Load Dump Power Characteristics (10ms Exponential Waveform)**



**Figure 4. Reverse Power Capability**

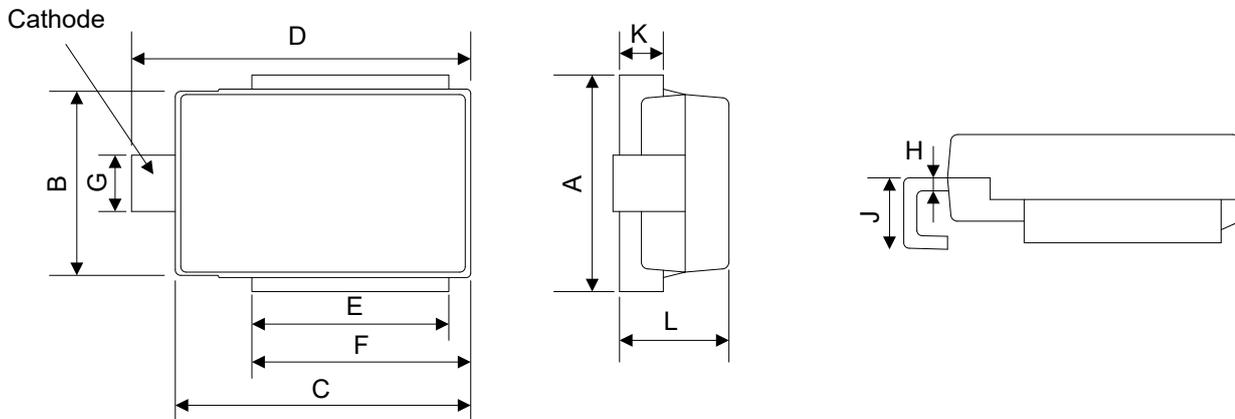


**Figure 5. Pulse Waveform**



**Figure 6. Typical Junction Capacitance**

## Package Outline Dimensions (DO-218AB)



Dimension	Inches		Millimeters	
	Min	Max	Min	Max
A	0.374	0.413	9.5	10.5
B	0.327	0.342	8.3	8.7
c	0.512	0.539	13.0	13.7
D	0.592	0.669	15.0	17.0
E	0.335	0.358	8.5	9.1
F	0.374	0.398	9.5	10.1
G	0.094	0.122	2.4	3.1
H	0.020	0.028	0.5	0.7
J	0.106	0.146	2.7	3.7
K	0.075	0.083	1.9	2.1
L	0.185	0.201	4.7	5.1