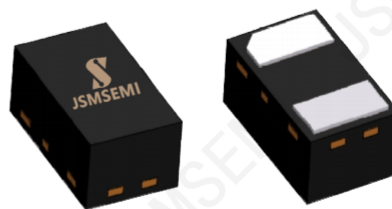


Features

- 70 Watts peak pulse power($t_p=8/20\mu s$)
- Bidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping Voltage
- Low leakage current
- Low capacitance($C_j=0.4pF$ typ.IO-IO)
- Protection one data/power line
- IEC61000-4-2 $\pm 15KV$ contact; $\pm 20KV$ air
- IEC 61000-4-4(EFT)40A(5/50ns)
- IEC 61000-4-5(Lightning)3.5A(8/20 μs)



DFN1006

Applications

- Cell Phone Handsets and Accessories
- Microprocessor based equipment
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- Portable Instrumentation

Mechanical Characteristics

- DFN1006 package
- Molding compound flammability rating: UL 94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant

Absolute Maximum Rating

Rating	Symler	Value	Units
Peak Pulse Power ($t_p=8/20\mu s$)	P_{PP}	70	Watts
Peak Pulse Current ($t_p=8/20\mu s$)	I_{PP}	3.5	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V_{ESD}	20 15	KV
Lead Soldering Temperature	T_L	260(10seconds)	$^{\circ}C$
Junction Temperature	T_J	-55 to + 150	$^{\circ}C$
Storage Temperature	T_{stg}	-55 to + 150	$^{\circ}C$

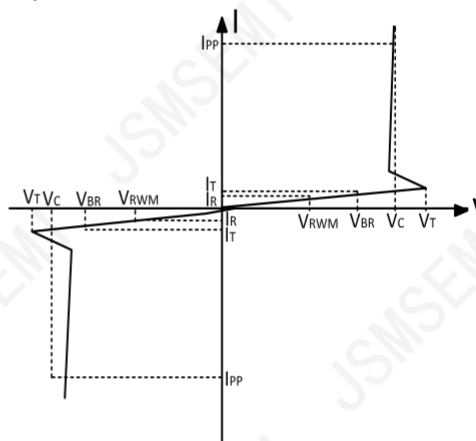
Electrical Characteristics

Parameter	Symler	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{RWM}	—	—	—	3.3	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	5.0	7.5	9.0	V
Reverse Leakage Current	I_R	$V_{RWM}=3.3V, T=25^{\circ}C$	—	0.1	0.5	μA
Peak Pulse Current	I_{PP}	$t_p=8/20\mu s$	—	—	3.5	A
Clamping Voltage	V_C	$I_{PP}=1.0A, t_p=8/20\mu s$	—	8	11	V
Clamping Voltage	V_C	$I_{PP}=3.5A, t_p=8/20\mu s$	—	16	20	V
Junction Capacitance	C_j	$V_R=0V, f=1MHz$	—	0.4	0.5	pF

Electrical Parameters (TA= 25°C unless otherwise noted)

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Peak Reverse Working Voltage
I_R	Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current

Note:8/20us pulse Waveform.



Typical Characteristics

Figure 1: Peak Pulse Power vs. Pulse Time

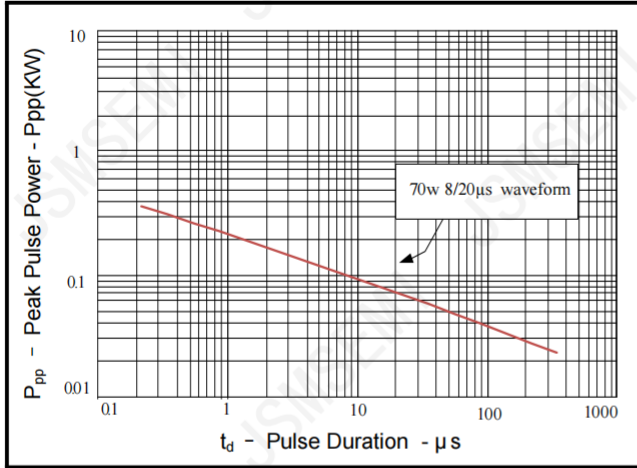


Figure 2: Power Derating Curve

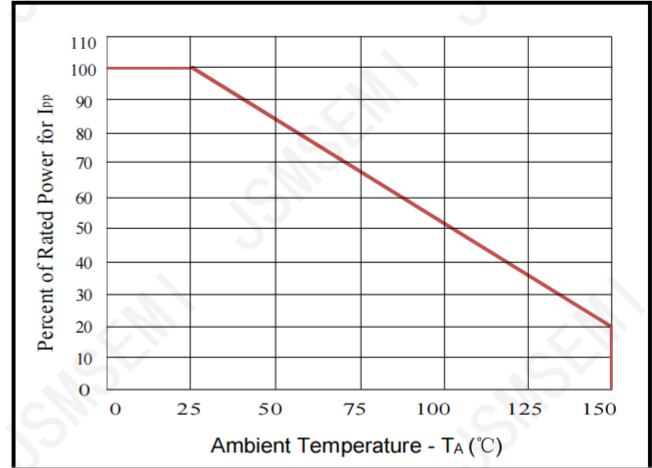


Figure 3: Pulse Waveform

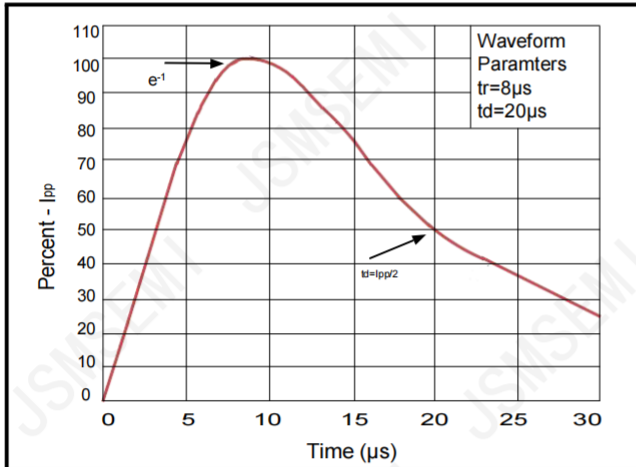
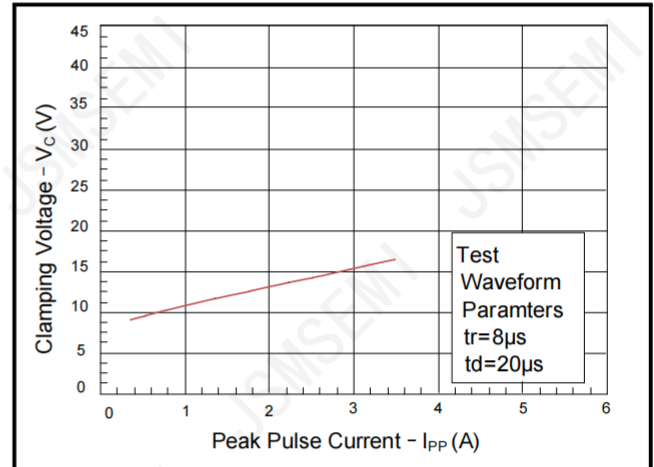
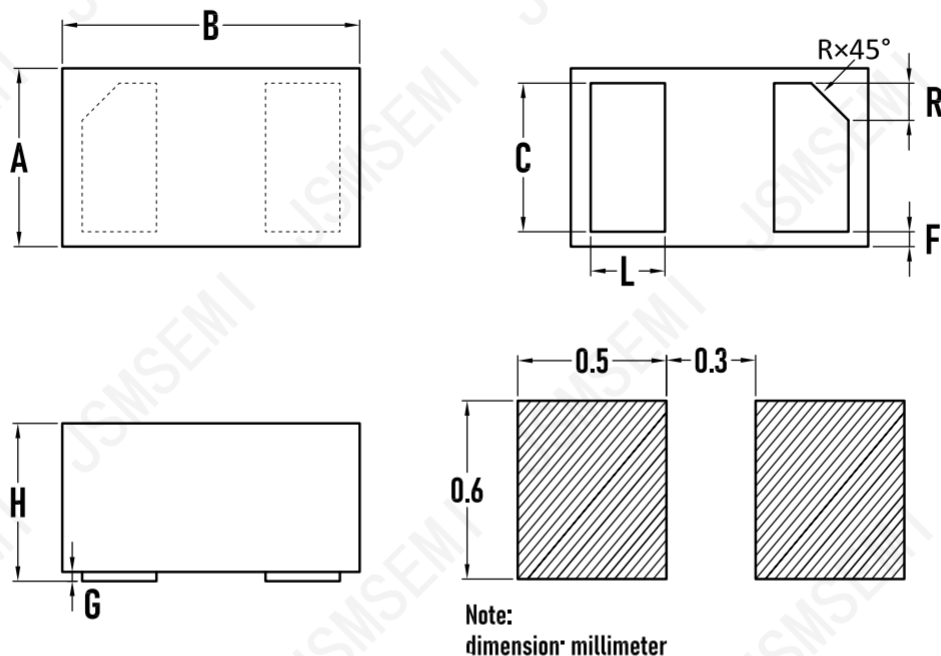


Figure 4: Clamping Voltage vs. I_{pp}



Outline Drawing – DFN1006



SYMBOL	MILLIMETER		
	MIN.	Typ.	MAX.
A	0.55	0.60	0.65
B	0.95	1.00	1.05
C	0.45	0.50	0.55
L	0.20	0.25	0.30
F	0.05REF		
G	0.00	0.02	0.05
H	0.45	0.50	0.55
R	0.07	0.12	0.17

Revision History

Rev.	Change	Date
V1.0	Initial version	6/27/2021

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