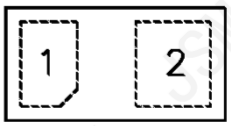
Features

- Transient Voltage Suppressors
- Bi-Directional Transient Voltage Suppressor
- Low Leakage
- Response Time is Typically < 1 ns
- IEC61000−4−2 Level 4ESD Protection
- ROHS Compliant
- UL-94 V-0 / Green EMC
- Device Marking Code



Equivalent Circuit

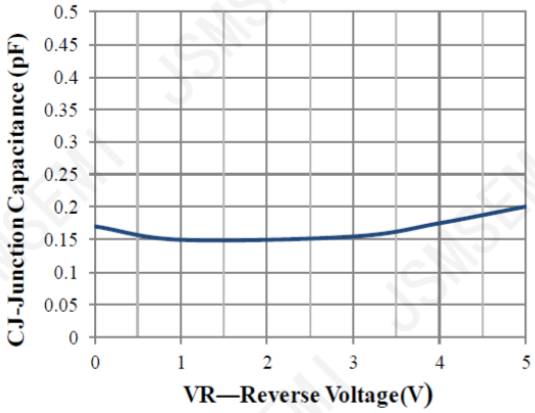
Maximum Ratings（Ta = 25 ℃）

Symbol	Parameter	Value	Units
V_{ESD}-Air	ESD Voltage IEC61000-4-2 Air	±25	kV
V_{ESD}-Contact	ESD Voltage IEC61000-4-2 Contact	±20	kV
Ppk	Peak Pulse Power (8/20μs)	60	W
T_J	Junction Temperature	-55 to 125	℃
T_{STG}	Storage Temperature	-55 to 150	℃
I_{PP}	Peak Pulse Current (8/20μs)	3.0	A

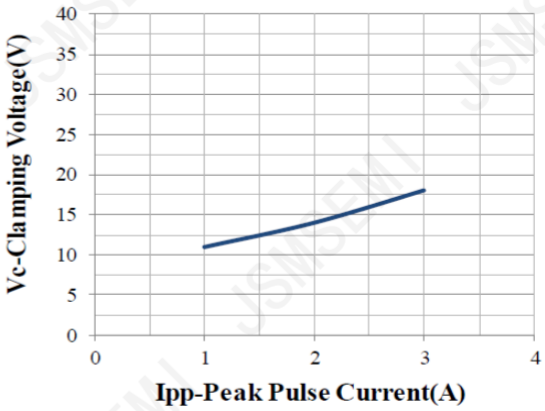
Electrical Characteristics （Ta = 25 ℃Unless Otherwise Noted）

Symbol	Parameter	Conditions	Min	Typ	Max	Units
V_{RWM}	Reverse Working Peak Voltage				2	V
V_{BR}	Reverse Breakdown Voltage	IT=1mA	6.0	7.5	9.0	V
I_R	Reverse Current	V_{RWM}=2V			0.5	μA
Vc	Clamping Voltage	Ipp=1A(8×20μs pulse)			12	V
Vc	Clamping Voltage	Ipp=3A(8×20μs pulse)		18	20	V
C	Capacitance	V_R=0V,f=1MHz	0.2	0.25	0.3	pF

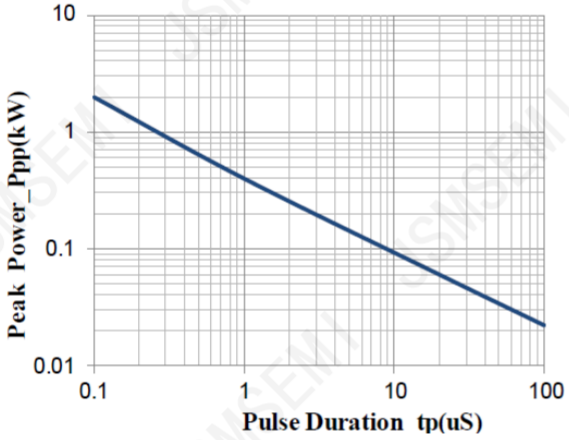
Typical Characteristics



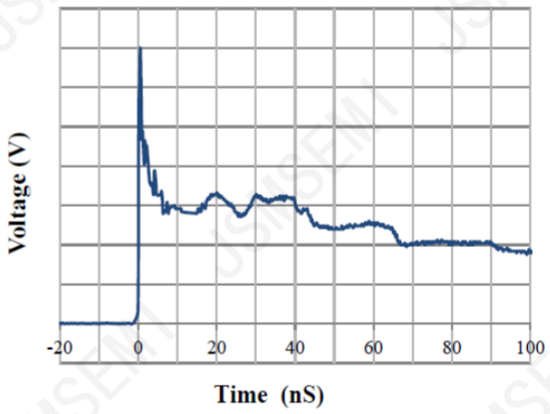
Junction Capacitance vs. Reverse Voltage



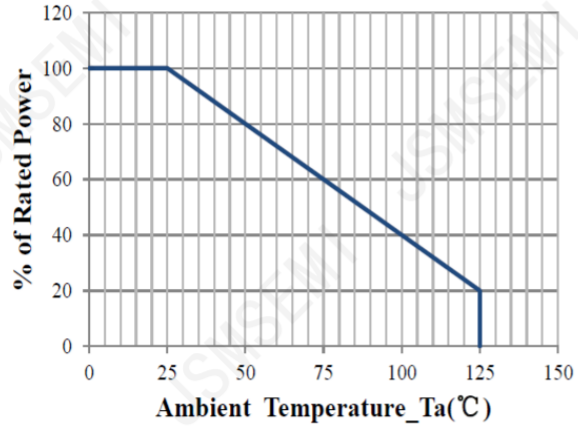
Clamping Voltage vs. Peak Pulse Current



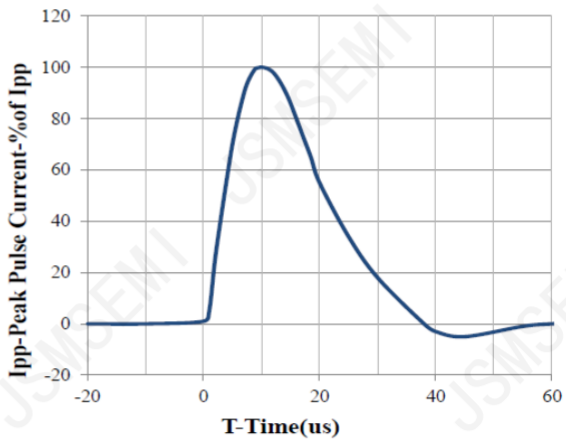
Peak Pulse Power vs. Pulse Time



IEC61000−4−2 Pulse Waveform



Power Derating Curve

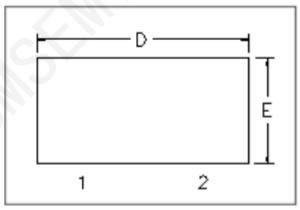


8 X 20us Pulse Waveform

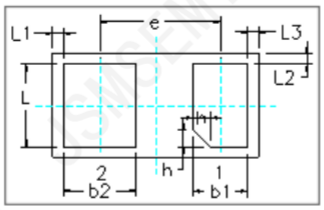
Package Dimensions

Package outline : DFN0603-2L

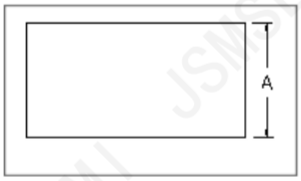
Top view



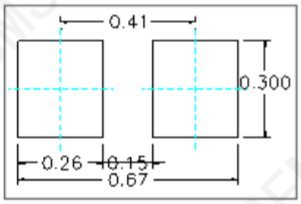
Bottom view



Side view



Soldering Pattern



SYMBOL	MILLIMETER		
	MIN	NOM	MAX
A	0.28	0.30	0.32
b1	0.13	0.18	0.23
b2	0.14	0.19	0.24
D	0.55	0.60	0.65
e	0.350BSC		
L1	0.030BSC		
L2	0.025BSC		
L3	0.035BSC		
E	0.25	0.30	0.35
L	0.20	0.25	0.30
h	0.00	0.05	0.10

Notice:

1.Lead no need to do plating
2.Other Tolerance: ±0.05
3.Dimensions are exclusive of Burrs,Mold Flash and Tie Bar extrusions
4.Unit: mm

Revision History

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

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