

Features

- 100 Watts Peak Pulse Power per Line ($t_p = 8/20\mu s$)
- Small Body Outline Dimensions
- Protects one I/O or Power Line
- Low Clamping Voltage
- Working Voltage: 5.0V
- Low Leakage Current

IEC COMPATIBILITY (EN61000-4)

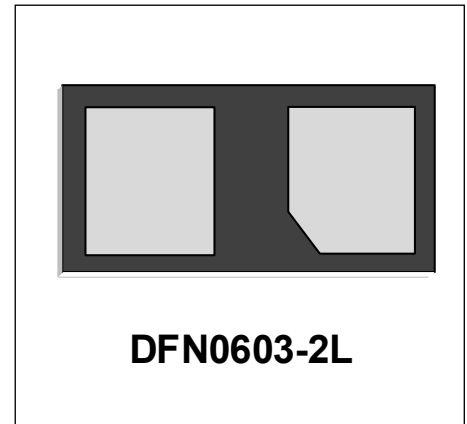
- IEC 61000-4-2 (ESD) $\pm 30kV$ (air), $\pm 30kV$ (contact)
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 10A (8/20 μs)

Mechanical Characteristics

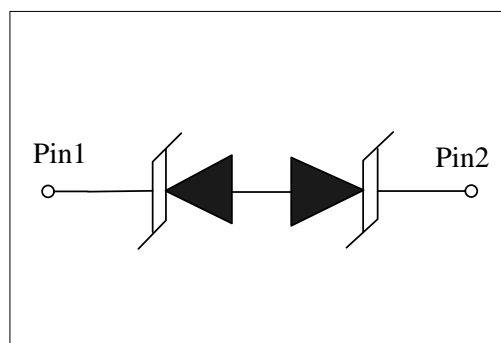
- DFN0603-2L package
- Marking : Marking Code
- Packaging: Tape and Reel per EIA 481
- RoHS Compliant

Applications

- Laptop Computers
- Cellular Phones
- Digital Cameras
- Personal Digital Assistants (PDAs)



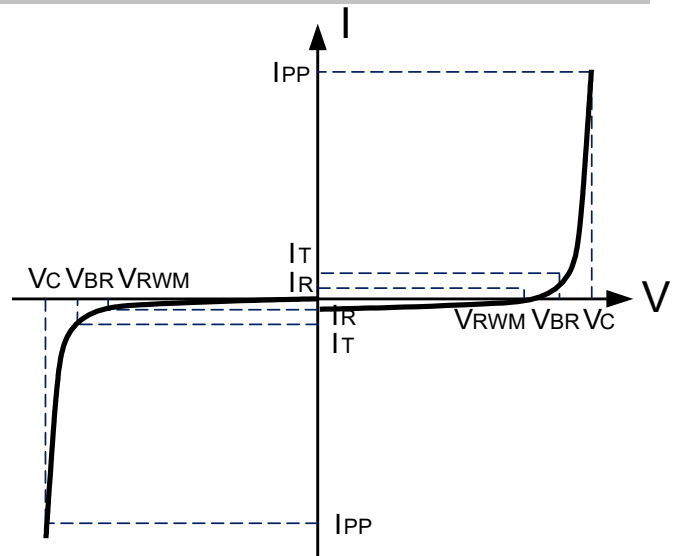
Schematic & PIN Configuration



Absolute Maximum Rating			
Rating	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu s$)	P_{PP}	100	W
Peak Pulse Current($t_p=8/20\mu s$)	I_{pp}	8	A
Operating Temperature	T_J	-55 to + 125	°C
Storage Temperature	T_{STG}	-55 to +150	°C

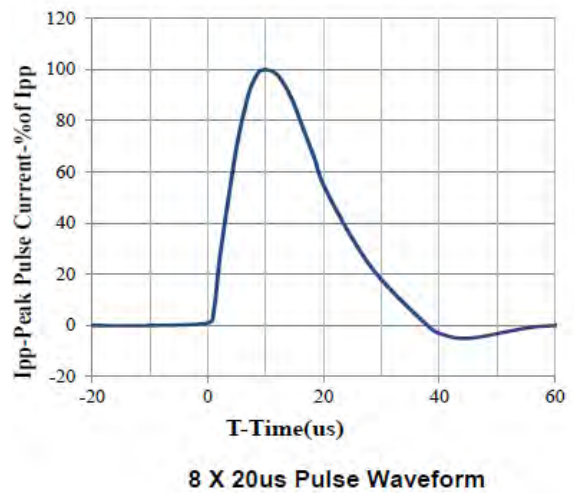
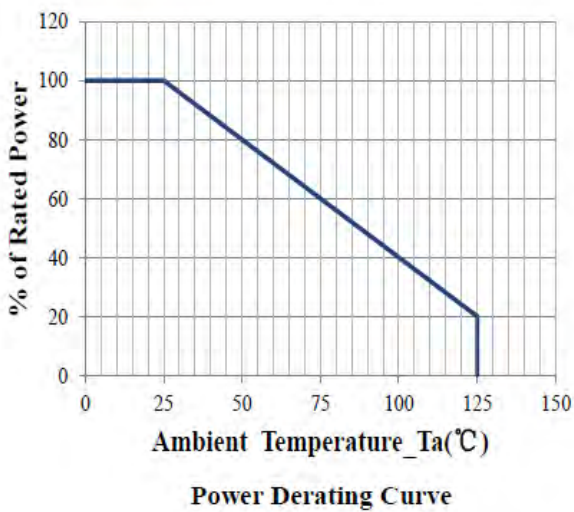
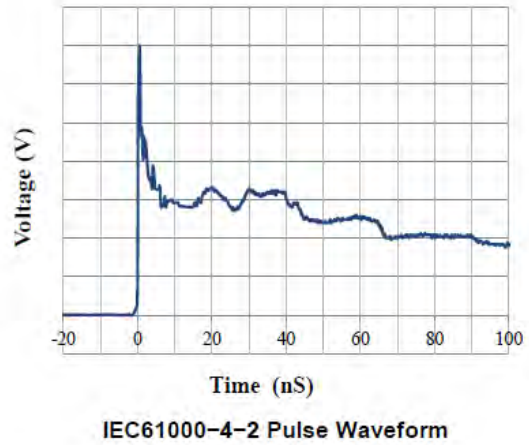
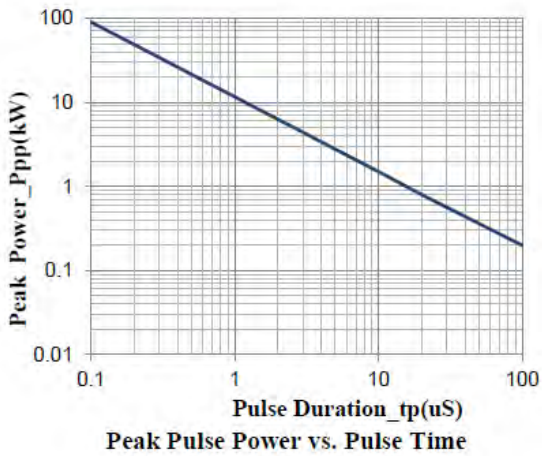
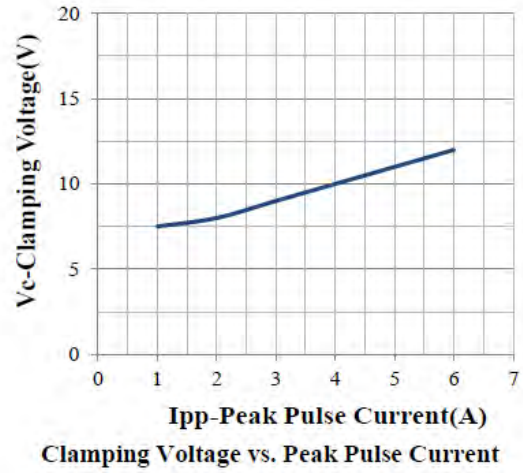
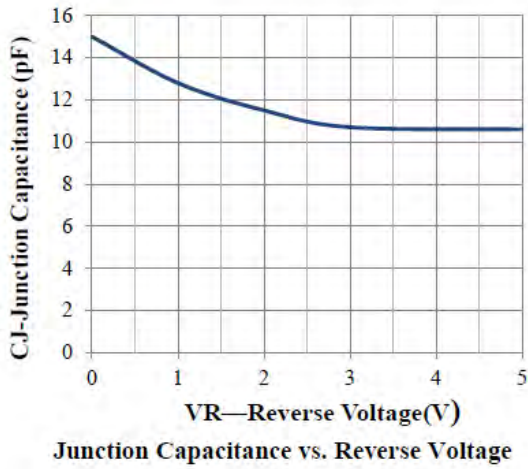
Electrical Parameters (T=25°C)

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


Electrical Characteristics

MDFN1C031VW						
Parameter	Symbol	Conditions	Minimum	Typical	Maximum	Units
Reverse Stand-Off Voltage	V_{RWM}				5	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	6.0			V
Reverse Leakage Current	I_R	$V_{RWM}=5V, T=25^\circ C$			500	nA
Clamping Voltage	V_C	$I_{PP}=1A, t_p=8/20\mu s$			7.5	V
	V_C	$I_{PP}=8A, t_p=8/20\mu s$			12.5	V
Junction Capacitance	C_j	$V_R=0V, f=1MHz$		15	18	pF

Typical Characteristics



Outline Drawing –DFN0603-2L

PACKAGE OUTLINE

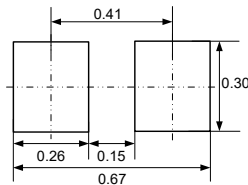
Bottom View Top View

Side View

DFN0603-2L

SYMBOL	MILIMETER			Dimension In Inches		
	NOM	MIN	MAX	NOM	MIN	MAX
A	--	0.280	0.320	--	0.011	0.013
A1	--	--	0.050	--	--	0.002
D	0.610	0.570	0.630	0.024	0.022	0.025
E	0.310	0.270	0.330	0.012	0.011	0.013
b	0.180	0.155	0.205	0.007	0.006	0.008
L	0.240	0.200	0.260	0.009	0.008	0.010
h	--	0.050	0.100	--	0.002	0.004
L1	0.035REF			0.001REF		
L2	0.035REF			0.001REF		
e	0.360BSC			0.014BSC		

Land Pattern



Marking Codes

Part Number	Marking Code
MDFN1C051VA	

Package Information

Device	Package	Carrier	Quantity	HSF Status
MDFN1C051VA	DFN0603-2L	Tape & Reel	10000pcs / Reel	RoHS compliant

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