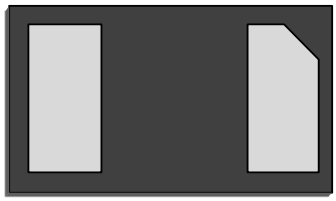
Features

- Small Body Outline Dimensions:
- Protects one I/O or power line
- Working Voltage: 12 V
- Low Leakage Current
- Response Time is Typically < 1 ns



DFN-2L

IEC Compatibility (EN61000-4)

- IEC 61000-4-2 (ESD) ±30kV (air), ±30kV (contact)
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning)14A (8/20μs)

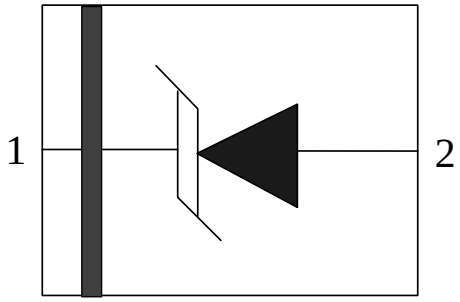
Mechanical Characteristics

- DFN-2L package
- Molding compound flammability rating: UL 94V-0
- Marking : Marking Code
- Packaging : Tape and Reel per EIA 481
- RoHS Compliant

Applications

- Cellular Handsets & Accessories
- Personal Digital Assistants (PDAs)
- Notebooks & Handhelds
- Portable Instrumentation
- Digital Cameras
- MP3 Players

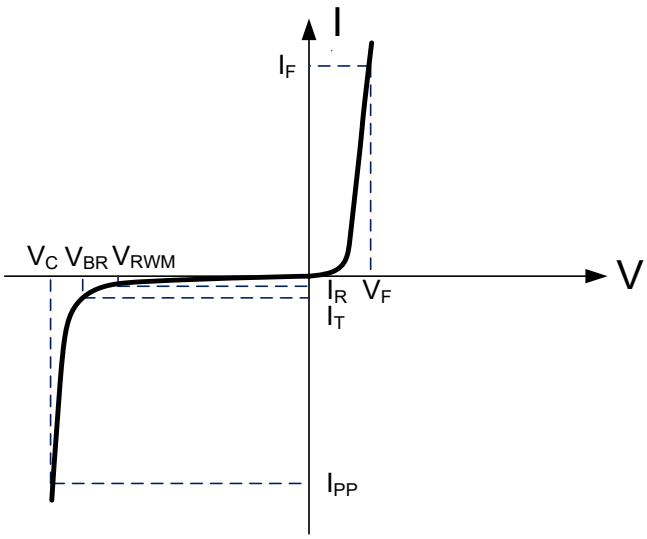
Schematic & PIN Configuration



Absolute Maximum Rating			
Rating	**Symbol**	**Value**	**Units**
Peak Pulse Power (t_p = 8/20μs)	P_{PP}	500	Watts
Electrostatic discharge Voltage (See Note1 ,2)	V_{ESD}	30KV (contact)	Volts
		30KV (air)	
Operating Temperature	T_J	-55 to + 125	℃
Storage Temperature	T_{STG}	-55 to +150	℃

Electrical Parameters (T=25℃)

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

DW12DF-S						
Parameter	**Symbol**	**Conditions**	**Minimum**	**Typical**	**Maximum**	**Units**
Reverse Stand-Off Voltage	V_{RWM}				12.0	V
Peak Pulse Current	I_{PP}	t_p =8/20μs			14	A
Clamping Voltage	V_C	I_{PP}=14A, t_p=8/20μs		30	35	V
Reverse Breakdown Voltage	V_{BR}	I_T=1mA	13.3			V
Reverse Leakage Current	I_R	V_{RWM}=12V, T=25℃			0.5	μA
Junction Capacitance	C_j	V_R = 0V, f = 1MHz		90	100	pF

Notes： These specifications are guaranteed by design and characterization.

Typical Characteristics

Figure 1: Peak Pulse Power vs. Pulse Time

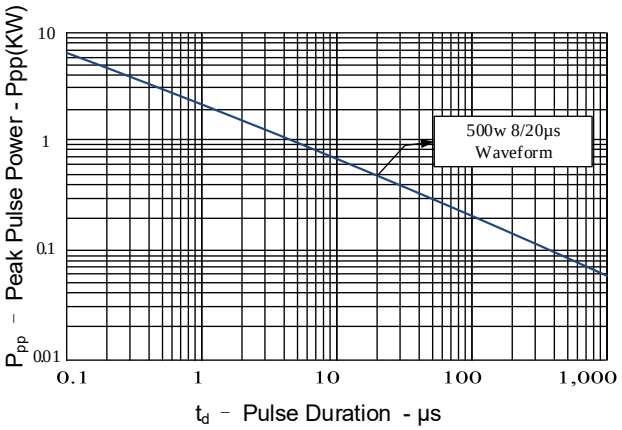


Figure 2: Power Derating Curve

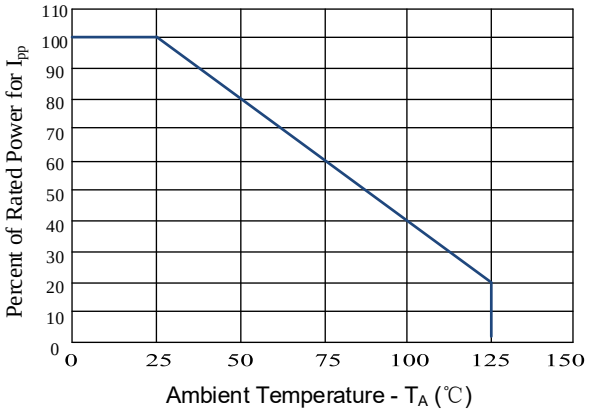


Figure 3: Clamping Voltage vs. Peak Pulse Current

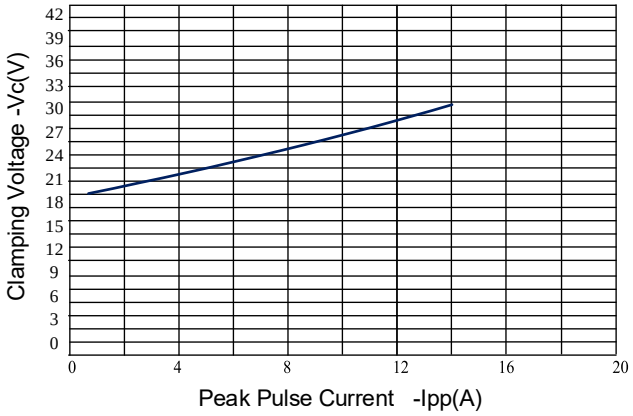


Figure 4: Normalized Junction Capacitance vs. Reverse Voltage

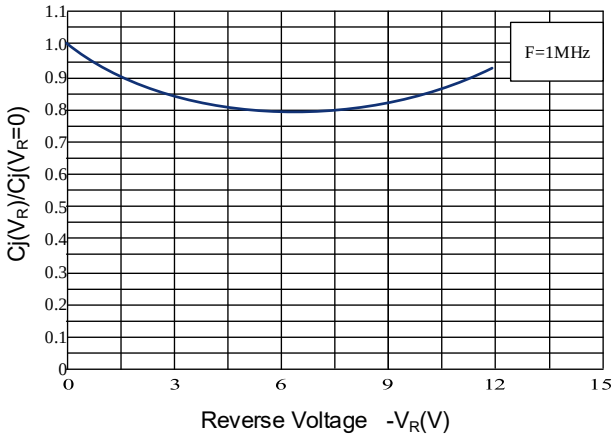


Figure 5: 8/20μs Pulse Waveform

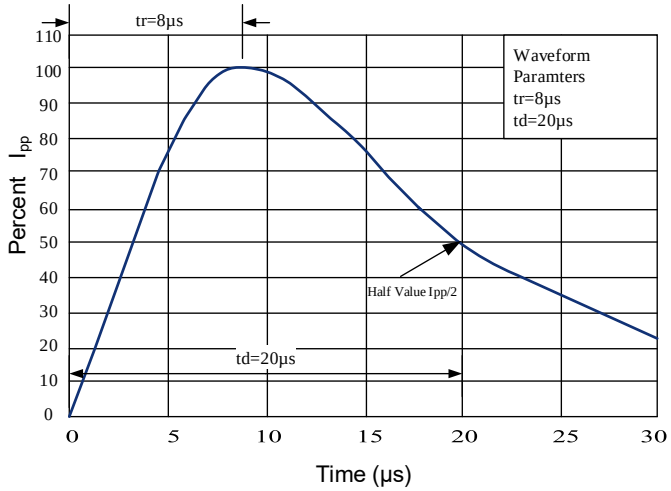
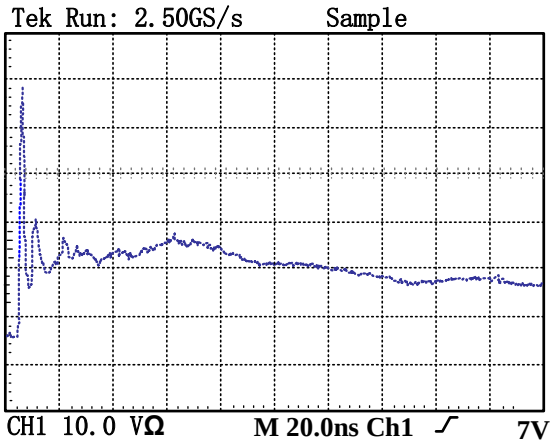
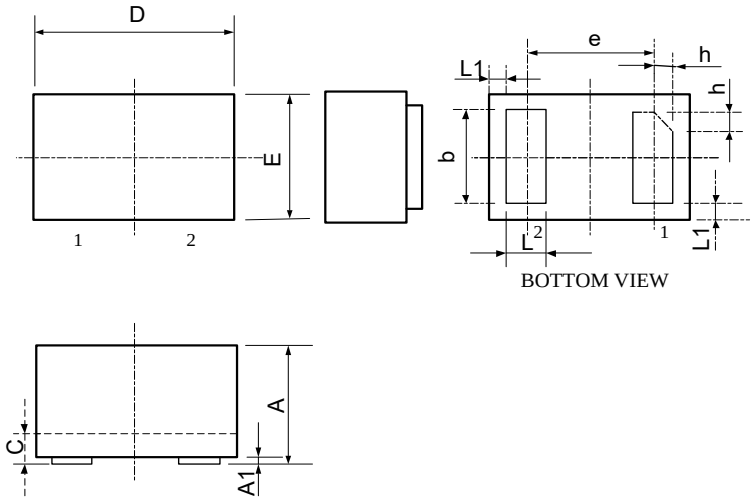


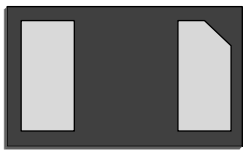
Figure 6: ESD Clamping(8kV Contact per IEC 61000-4-2)



Outline Drawing –DFN-2L

PACKAGE OUTLINE

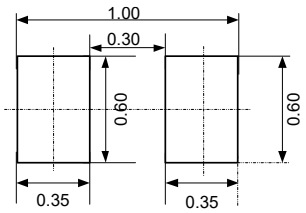




DFN-2L

SYMBOL	MILIMETER		
	MIN	NOM	MAX
A	0.45	0.50	0.55
A1	0	0.02	0.05
b	0.45	0.50	0.55
C	0.12	0.15	0.18
D	0.95	1.00	1.05
e	0.65BSC		
E	0.55	0.60	0.65
L	0.20	0.25	0.30
L1	0.05REF		
h	0.07	0.12	0.17

Land Pattern



Marking Codes

Part Number	DW12DF-S	Marking Code	1 SA 2

Package Information

Qty：10k/Reel