

FEATURES

- ✧ Protects one I/O or power line.
- ✧ Low clamping voltage.
- ✧ Working voltage: 5.0V.
- ✧ Low leakage current.
- ✧ RoHS compliant.

MAIN APPLICATIONS

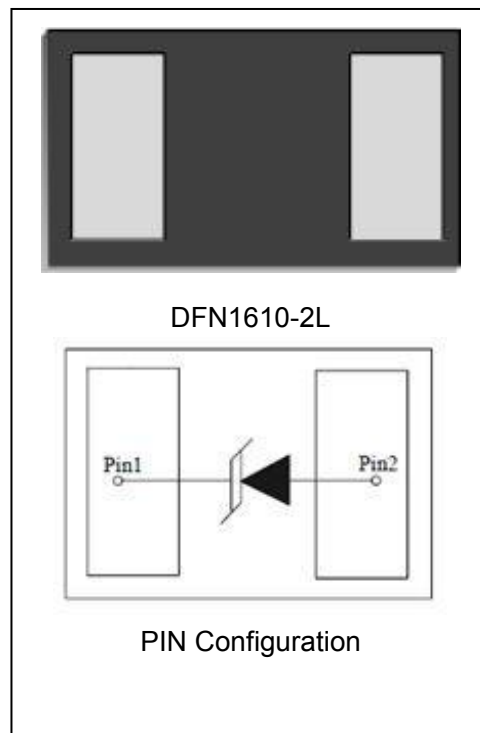
- ✧ Cellular phones.
- ✧ Personal digital assistants (PDA's).
- ✧ Laptop computers.
- ✧ Digital cameras.

PROTECTION SOLUTION TO MEET

- ✧ IEC61000-4-2 (ESD) $\pm 30\text{kV}$ (air), $\pm 30\text{kV}$ (contact).
- ✧ IEC61000-4-4 (EFT) 40A (5/50ns).
- ✧ IEC61000-4-5 (Lightning) 110A (8/20 μs).

MECHANICAL CHARACTERISTICS

- ✧ DFN1610-2L package.
- ✧ Molding compound flammability rating: UL 94V-0.
- ✧ Quantity per reel: 3,000pcs.
- ✧ Lead finish: lead free.
- ✧ Marking code: 5P.

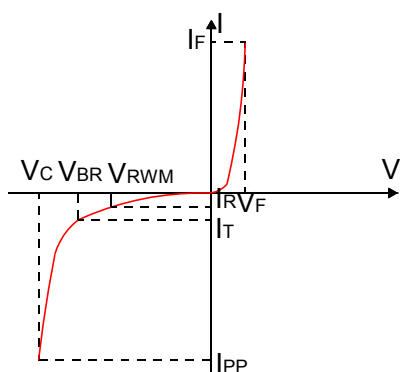
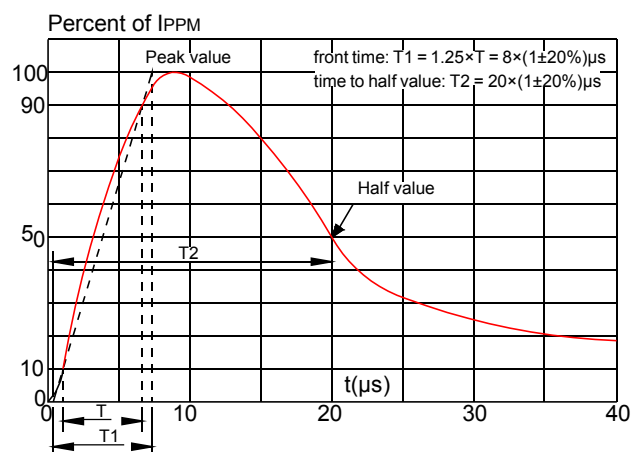
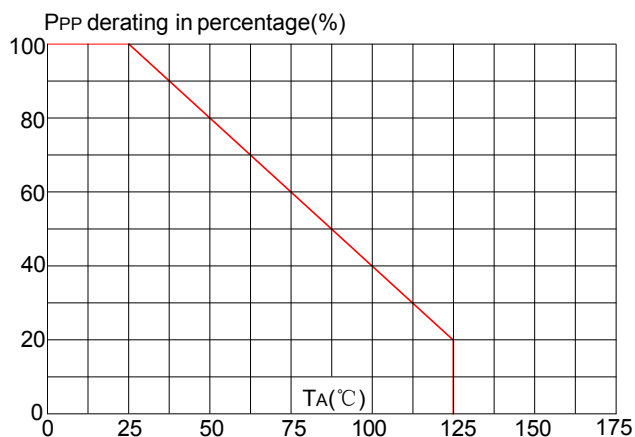
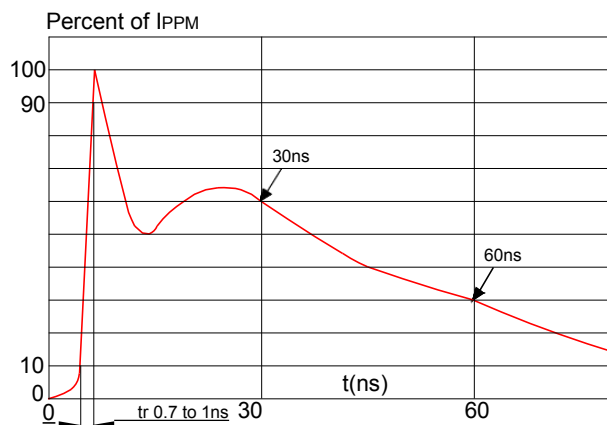


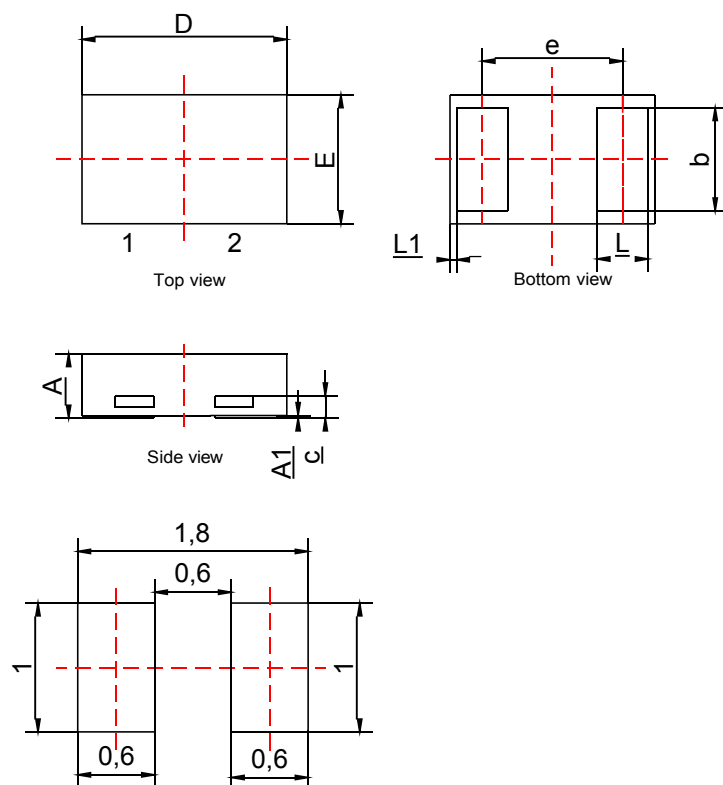
ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$, RH=45%-75%, unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak pulse power dissipation on 8/20 μs waveform	P_{PP}	2000	W
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V_{ESD}	+/- 30 +/- 30	kV
Lead soldering temperature	T_L	260 (10 sec.)	$^\circ\text{C}$
Operating junction temperature range	T_J	-55 to +125	$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 to +150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$)

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse working voltage	V_{RWM}				5.0	V
Reverse breakdown voltage	V_{BR}	$I_T = 1\text{mA}$	6	7	8	V
Reverse leakage current	I_R	$V_{RWM} = 5\text{V}$			1	μA
Peak pulse current	I_{PP}	$t_P = 8/20\mu\text{s}$			110	A
Clamping voltage	V_C	$I_{PP}=50\text{A}$, $t_P=8/20\mu\text{s}$		11	14	V
		$I_{PP}=80\text{A}$, $t_P=8/20\mu\text{s}$		13	15	
		$I_{PP}=110\text{A}$, $t_P=8/20\mu\text{s}$		14	17	
Junction capacitance	C_J	$V_{RWM} = 0\text{V}$, $f = 1\text{MHz}$		850	1050	pF

RATINGS AND V-I CHARACTERISTICS CURVES ($T_A=25^\circ\text{C}$, unless otherwise noted)
FIG.1:V- I curve characteristics (Uni-directional)

FIG.2: Pulse waveform (8/20 μs)

FIG.3: Pulse derating curve

FIG.4: ESD clamping (30KV contact)


PACKAGE MECHANICAL DATA


Symbol	Millimeter		
	Min.	Typ.	Max.
A	0.45	0.50	0.55
A1	0.00	0.02	0.05
b	0.85	0.90	0.95
c	0.08	0.12	0.18
D	1.55	1.60	1.65
e	1.1BSC		
E	0.95	1.00	1.05
L	0.35	0.40	0.45
L1	0.06BSC		

ORDERING INFORMATION

OUTLINE	Package	Reel Size	Quantity Per Reel
TAPING	DFN1610-2L	7 Inch	3,000 pcs

MARKING CODE

Part Number	Marking Code
JEU12DP	<div> <div>Pin1</div> <div>12P</div> <div>Pin2</div> </div>

 Website: <http://www.jksemi.com>

For additional information, please contact your local Sales Representative.

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