

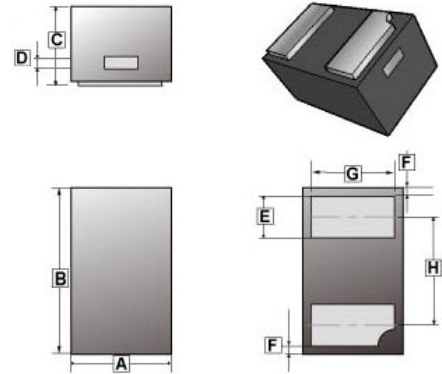
RoHS Compliant Product
 A suffix of "-C" specifies halogen & lead-free

DESCRIPTION

It is designed to protect voltage sensitive electronic components from ESD and other transients. Its excellent clamping capability, low leakage, low capacitance, and fast response time provide the best protection on the designs exposed to ESD.

The combination of small size, low capacitance, and high level ESD protection makes them a flexible solution for the applications such as HDMI, Display Port TM, and MDDI interfaces. It is designed to replace multiplayer varistors (MLV) in consumer applications such as mobile phone, notebook, PAD, STB, LCD TV etc.

DFNWB0.6x0.3-2L

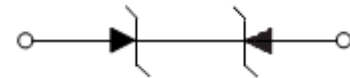


REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	0.27	0.37	E	0.125	0.195
B	0.57	0.67	F	0.03REF	
C	0.275	0.34	G	0.225	0.295
D	0.05 REF		H	0.365	0.435

FEATURES

- Low leakage current
- Low reverse clamping voltage
- Fast response time
- JESD22-A114-B ESD Rating of class 3B per human body model
- IEC 61000-4-2 Level 3 ESD protection

MARKING



PACKAGE INFORMATION

Package	MPQ	Leader Size
DFNWB0.6x0.3-2L	10K	7 inch

MAXIMUM RATINGS (T_A=25°C)

Parameter		Symbol	Rating	Unit
IEC 61000-4-2 ESD Voltage ¹	Air	V _{ESD}	±15	kV
	Contact		±15	
JESD22-A114-B ESD Voltage ¹	Per Human Body Model		±16	
ESD Voltage ¹	Per Machine Model		±0.4	
Peak Pulsed Power ²		P _{PP}	80	W
Peak Pulsed Current ²		I _{PP}	4	A
Maximum Lead Solder Temperature@ 10-second duration		T _L	260	°C
Junction and Storage Temperature Range		T _J , T _{STG}	150, -55~150	°C

Notes:

1. The device is stressed with 10 non-repetitive ESD pulses.
2. According to IEC61000-4-5, the waveform of the non-repetitive 8/20µs pulsed current decays by exponents.

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise noted.)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Working Peak Reverse Voltage ¹	V_{RWM}	-	-	5	V
Reverse Leakage Current@ $V_{RWM}=5\text{V}$	I_R	-	-	1	μA
Breakdown Voltage@ $I_T=1\text{mA}$	V_{BR}	6.5	9	-	V
Clamping Voltage@ $I_{PP}=4\text{A}$ ²	V_C	-	-	20	V
Junction Capacitance@ $V_R=0\text{V}$, $f=1\text{MHz}$	C_J	-	-	0.9	pF

Notes:

1. Other voltages are available upon request.
2. According to IEC61000-4-5, the waveform of the non-repetitive 8/20 μs pulsed current decays by exponents.

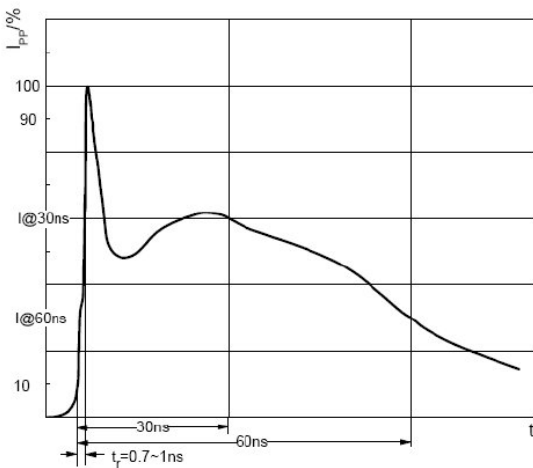
ESD STANDARDS COMPLIANCE

IEC61000-4-2 Standard

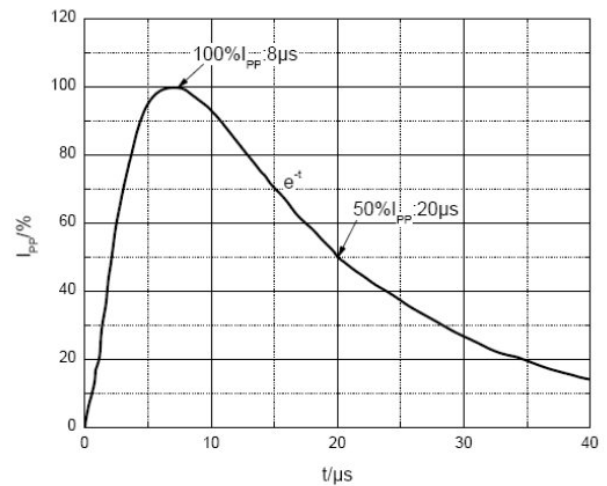
Contact Discharge		Air Discharge	
Level	Test Voltage kV	Level	Test Voltage kV
1	2	1	2
2	4	2	4
3	6	3	8
4	8	4	15

JESD22-A114-B Standard

ESD Class	Human Body Discharge V
0	0~249
1A	250~499
1B	500~999
1C	1000~1999
2	2000~3999
3A	4000~7999
3B	8000~15999



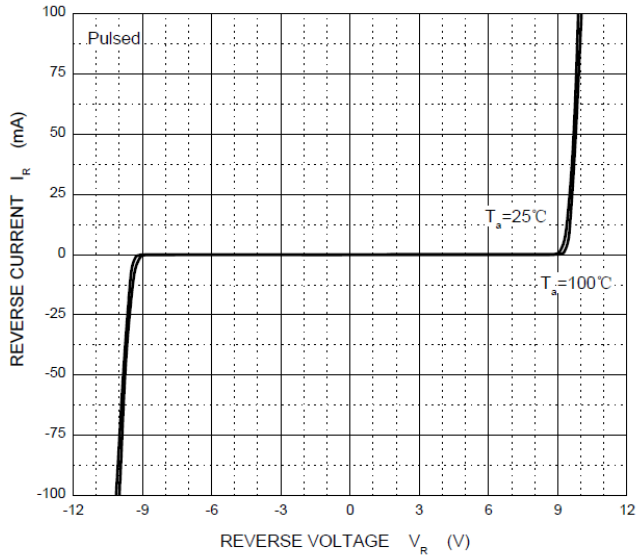
ESD pulse waveform according to IEC61000-4-2



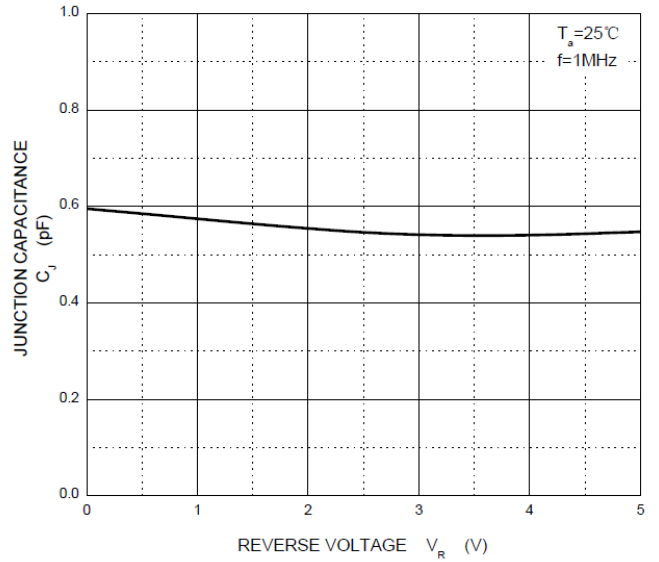
8/20 μs pulse waveform according to IEC 61000-4-5

CHARACTERISTICS CURVES

Reverse Characteristics



Capacitance Characteristics



V_C — I_{PP}

