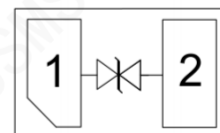
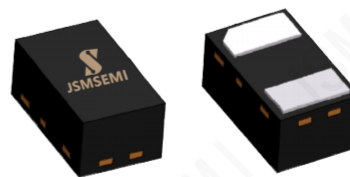


## Description

The PESD18VF1BLYL-JSM is an ESD diode with 32W (8/20  $\mu$ s) peak pulse power, designed to protect one high - speed data line. It features low capacitance ESD protection and is packaged in DFN1006-2. Complying with RoHS and having a matte tin lead finish (Pb - Free), it meets IEC61000 - 4 - 2 Level 4 for ESD protection.



DFN1006-2

## Features

- ◆ Ultra low capacitance: 0.25 - 0.45pF typical  
(VR = 0V, f = 1MHz)
- ◆ Low leakage: 0.1 $\mu$ A max at VRWM = 5V
- ◆ Reverse Working Peak Voltage: 18V
- ◆ Protects one high - speed data line
- ◆ Low clamping voltage: 27 - 32V at IPP = 1A (8/20  $\mu$ s)
- ◆ Complies with following standards:  
IEC61000 - 4 - 2 (ESD) immunity test:  
Contact Discharge > 8kV;  
Air Discharge > 15kV
- ◆ RoHS Compliant
- ◆ 32W (8/20 $\mu$ s) Peak Pulse Power

## Applications

- ◆ Communication System
- ◆ Portable Instrumentation
- ◆ Audio and Video Equipment
- ◆ Computers and Peripherals
- ◆ USB 2.0, USB 3.0 Ports

## Ordering Information

Order number	Package	Operation Temperature Range	MSL Grade	Ship, Quantity	Green
PESD18VF1BLYL-JSM	DFN1006-2	-55 to +150	3	T&R,10000	RoHS

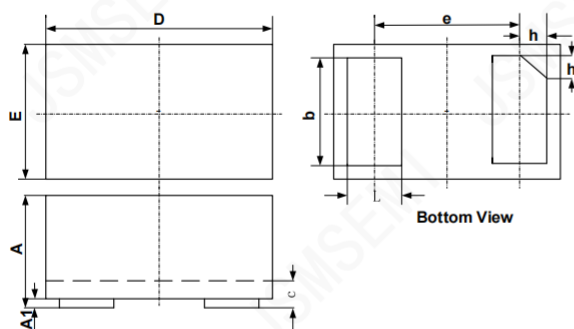
**Maximum Ratings(TA=25°C)**

Symbol	Parameter	Value	Unit
PPK	Peak Pulse Power	32	W
IPP	Peak Pulse Current	1	A
VESD (Contact)	Contact ESD Voltage per IEC61000-4-2	8	kV
VESD (Air)	Air ESD Voltage per IEC61000-4-2	15	kV
TJ	Junction Temperature	-55 to +150	°C
TSTG	Storage Temperature	-55 to +150	°C

**Electrical Characteristics(TA=25°C)**

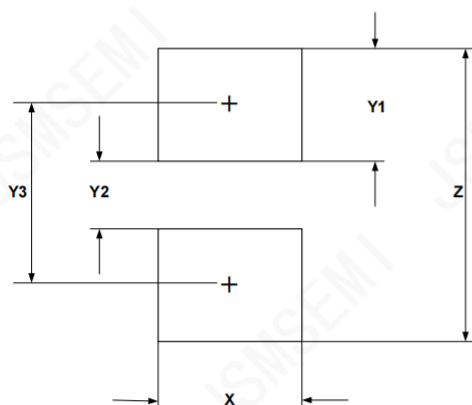
Symbol	Parameter	Conditions	Min	Typ	Max	Unit
VRWM	Reverse Working Peak Voltage				18	V
VBR	Reverse Breakdown Voltage	IT = 1mA	18.5		23	V
IR	Reverse Leakage Current	VRWM = 5V			0.1	μA
VC	Clamping Voltage	IPP = 1A (8/20μs)		27	32	V
						V
CJ	Capacitance	VR = 0V, f = 1MHz		0.25	0.45	pF

## DFN 1006-2 Package Outline Drawing



SYM	DIMENSIONS					
	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.45	0.50	0.55	0.018	0.020	0.022
A1	0.00	0.02	0.05	0.000	0.001	0.002
b	0.45	0.50	0.55	0.018	0.020	0.022
c	0.12	0.15	0.18	0.005	0.006	0.007
D	0.95	1.00	1.05	0.037	0.039	0.041
e	0.65 BSC			0.026 BSC		
E	0.55	0.60	0.65	0.022	0.024	0.026
L	0.20	0.25	0.30	0.008	0.010	0.012
h	0.07	0.12	0.17	0.003	0.005	0.007

## Suggested Land Pattern



SYM	DIMENSIONS	
	MILLIMETERS	INCHES
X	0.60	0.024
Y1	0.50	0.020
Y2	0.30	0.012
Y3	0.80	0.032
Z	1.30	0.052

## Revision History

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

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