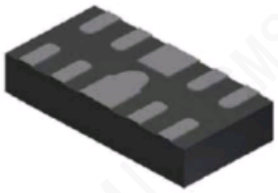
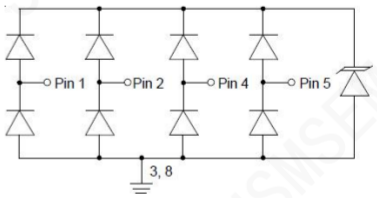
Features

- 50 W(8/20μs)Peak Pulse Power
- Low Capacitance ESD Protection
- Flow Through DFN2.5x1.0-10L Package
- RoHS Compliant
- Matte Tin Lead finish(Pb-Free)
- Protect Four High Speed Data Lines
- Meet IEC61000-4-2 Level 4:
  Contact Discharge>20kV
  Air Discharge>25kV



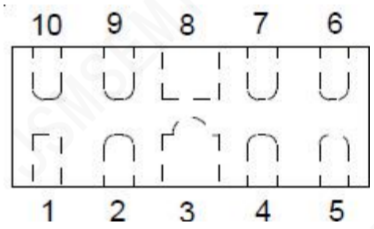
Circuit Diagram



Applications

- PCI Express
- MDDI Ports
- eSATA Interfaces
- Display Port Interface
- Digital Visual Interface (DVI)
- High Definition Multi-Media Interface(HDMI)

PIN Diagram



Ordering information

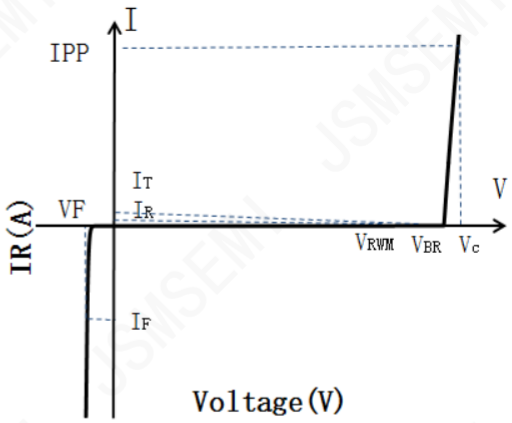
Device	Package	ReelSize	Qty/Reel
PUSB3FR4Z-JSM	DFN2510-10L	7 inch	3000

Maximum Ratings(Ta=25℃)

Symbol	Parameter	Value	Unit
P_{PK}	Peak Pulse Power	50	W
I_{PP}	Peak Pulse Current	4.5	A
V_{ESD}(Contact)	Contact ESD Voltage per IEC61000-4-2	20	kV
V_{ESD}(Air)	Air ESD Voltage per IEC61000-4-2	25	kV
TJ	Junction Temperature	-55 to+125	℃
TSTG	Storage Temperature	-55 to+150	℃

Portion Electronics Parameter

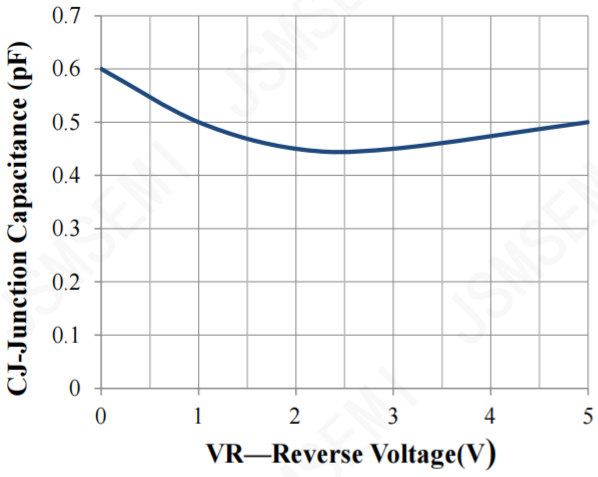
Symbol	Parameter
I_T	Test Current
I_{PP}	Maximum Reverse Peak Pulse Current
Vc	Clamping Voltage @Ic



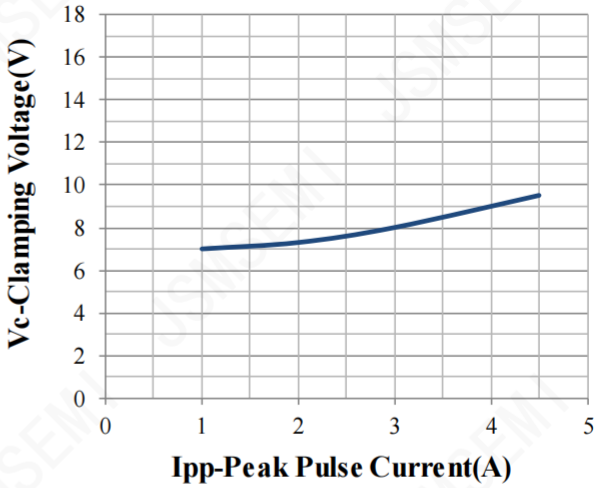
Electrical Characteristics(Ta=25℃)

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
VRWM	Reverse Working Peak Voltage				3.3	V
VBR	Reverse Breakdown Voltage	IT=1mA	4	5.2	6.5	V
IR	Reverse Leakage Current	VRWM = 3 . 3 V			0.1	μA
VC	Clamping Voltage	IPP=4.5A(8/20μs)			11	V
CJ	Capacitance	VR=0V,f=1MHz Between I/O pins		0.3	0.4	pF
CJ	Capacitance	VR=0V,f=1MHz Any I/O pin to ground		0.6	0.7	pF

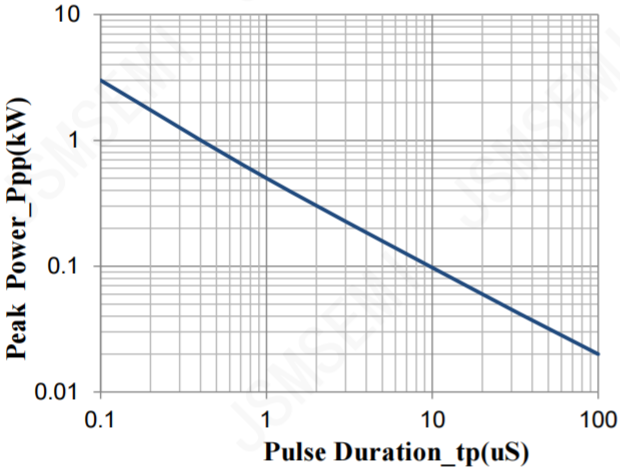
Typical Performance Curves



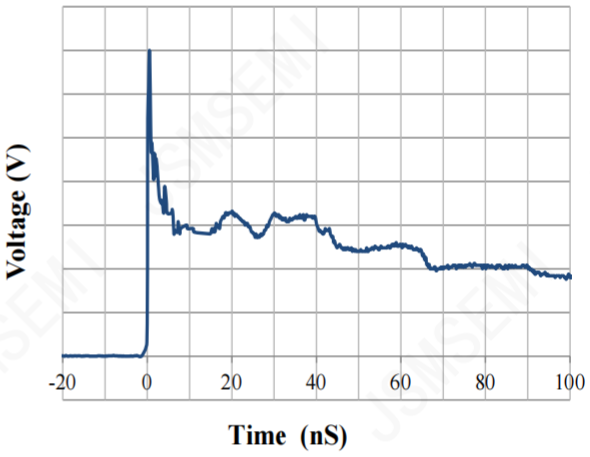
Junction Capacitance vs. Reverse Voltage



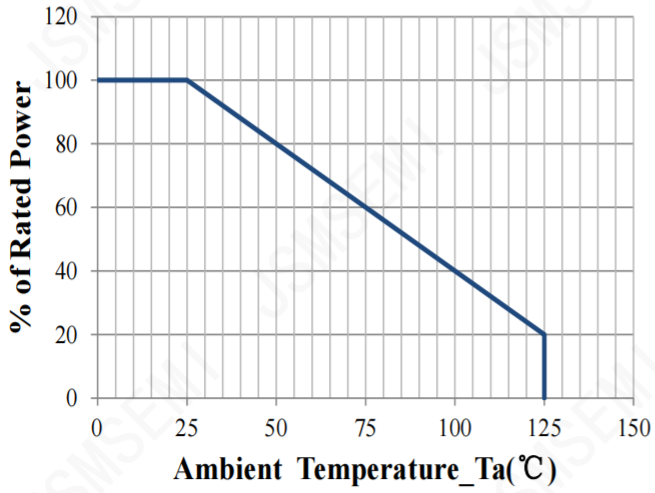
Clamping Voltage vs. Peak Pulse Current



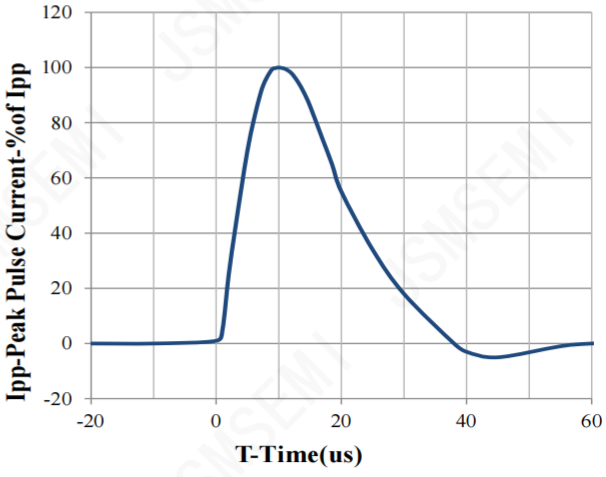
Peak Pulse Power vs. Pulse Time



IEC61000-4-2 Pulse Waveform

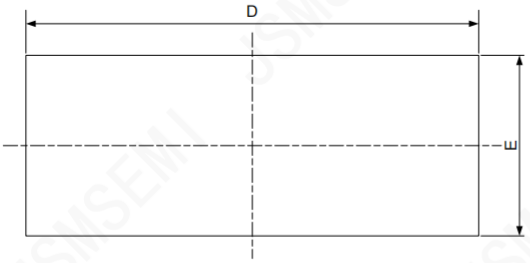


Power Derating Curve

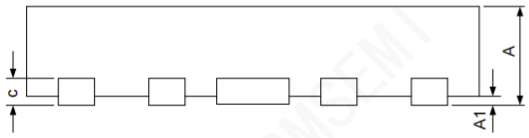


8 X 20us Pulse Waveform

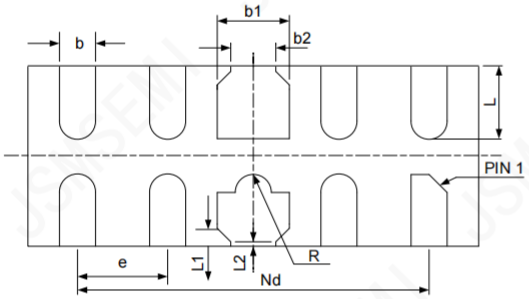
DFN2510-10L Package Outline Drawing



TOP VIEW



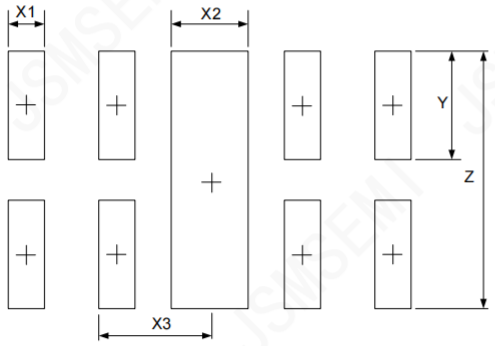
SIDE VIEW



BOTTOM VIEW

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	0.15	0.20	0.25	0.006	0.008	0.010
b1	0.35	0.40	0.45	0.014	0.016	0.018
b2	0.20	0.25	0.30	0.008	0.010	0.012
c	0.10	0.15	0.20	0.004	0.006	0.008
D	2.45	2.50	2.55	0.098	0.100	0.102
e	0.50BSC			0.020BSC		
Nd	2.00BSC			0.080BSC		
E	0.95	1.00	1.05	0.038	0.040	0.042
L	0.35	0.40	0.45	0.014	0.016	0.018
L1	0.075REF			0.003REF		
L2	0.050REF			0.002REF		
h	0.08	0.12	0.15	0.003	0.005	0.006
R	0.05	0.10	0.15	0.002	0.004	0.006

Suggested Land Pattern



SYM	DIMENSIONS	
	MILLIMETERS	INCHES
X1	0.200	0.008
X2	0.400	0.016
X3	0.500	0.020
Y	0.600	0.024
Z	1.400	0.056

Revision History

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

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