



APPLICATIONS

- ◆ Serial ATA
- ◆ PCI Express
- ◆ Desktops, Servers and Notebooks
- ◆ MDDI Ports
- ◆ USB 2.0, 3.0 and 3.1
- ◆ Display Ports
- ◆ HDMI 1.3, 1.4, 2.0, 2.1
- ◆ Digital Visual Interfaces (DVI)

IEC COMPATIBILITY

- ◆ IEC 61000-4-2 (ESD) $\pm 20\text{kV}$ (Air), $\pm 20\text{kV}$ (Contact)
- ◆ IEC 61000-4-5 (Surge) 9A (8/20 us)

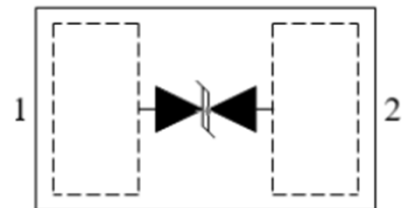
FEATURES

- ◆ Reverse Standoff Voltage : 5V
- ◆ Ultra-Low Capacitance : 0.2pF (typ.)
- ◆ Marking : a

DFN0603-2L



PIN CONFIGURATION



DEVICE CHARACTERISTICS

YSZ0P2005F2

MAXIMUM RATING (TA=25°C UNLESS OTHERWISE NOTED)			
PARAMETER	SYMBOL	VALUE	UNITS
ESD per IEC 61000-4-2 (Air)	V _{ESD}	±20	KV
ESD per IEC 61000-4-2 (Contact)		±20	
Peak Pulse Power (tp=8/20 μs)	P _{PP}	55	W
Peak Pulse Current (tp=8/20 μs)	I _{PP}	9	A
Operating Temperature Range	T _J	-40 ~ +125	°C
Storage Temperature Range	T _{STG}	-55 ~ +150	°C

ELECTRICAL CHARACTERISTICS (TA=25°C UNLESS OTHERWISE NOTED)						
PARAMETER	TEST CONDITION	SYMBOL	Min.	Typ.	Max.	UNITS
Reverse Working Voltage		V _{RWM}	-	-	5	V
Reverse Leakage Current	V _R =5V	I _R	-	100	200	μA
Breakdown Voltage	I _T =1mA	V _{BR}	5.5	10	-	V
Holding Voltage	I _H =100mA	V _H	1.2	-	-	V
Clamping Voltage (NOTE 1)	I _{PP} =9A, tp=8/20us	V _C	-	6	-	V
	I _{TLP} =16A, tp=10/100ns		-	6	-	V
Dynamic Resistance (NOTE 1、2)	tp=10/100ns	R _{DYN}	-	0.23	-	Ω
Junction Capacitance (NOTE 1)	V _R =0V, f=1MHz	C _J	-	0.20	0.25	pF
	V _R =0V, f=1GHz		-	0.18	0.20	

NOTES :

1. Guaranteed by design and not subject to production test.
2. R_{DYN} calculated based on I_{PP}=8A to I_{PP}=16A, tp=10/100ns.

DEVICE CHARACTERISTICS

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FIG. 1-TLP Clamping Voltage

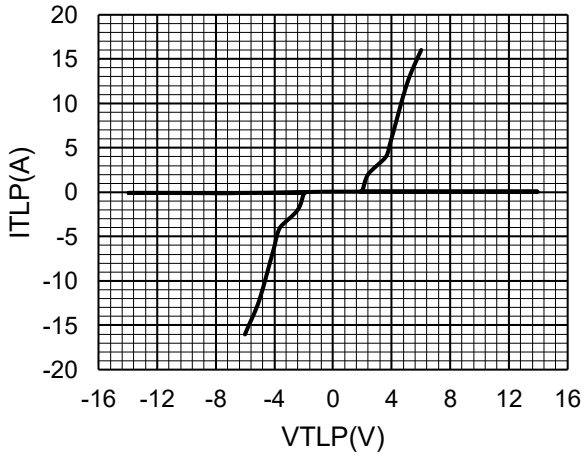


FIG. 2-Junction Capacitance

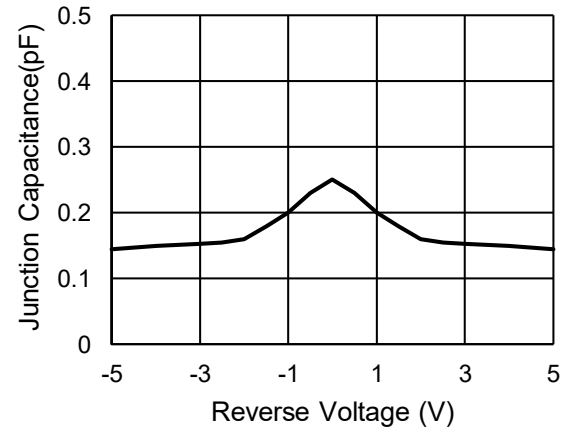


FIG. 3-8/20 μ s pulse waveform

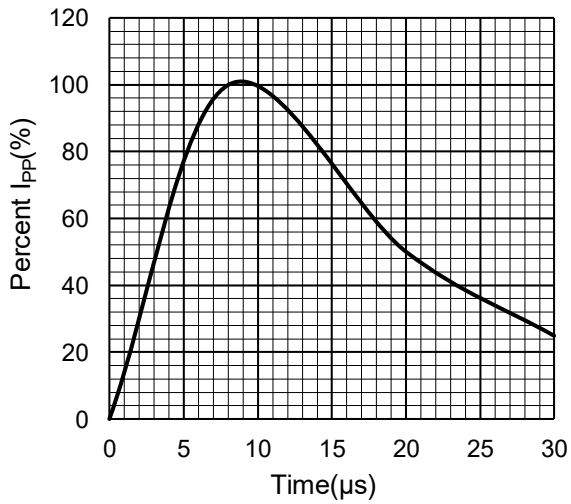
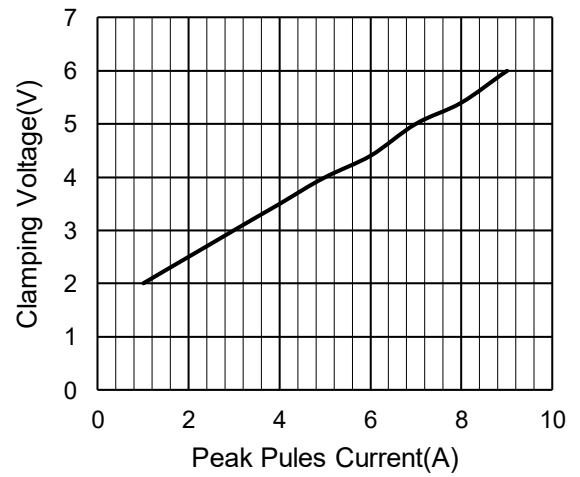


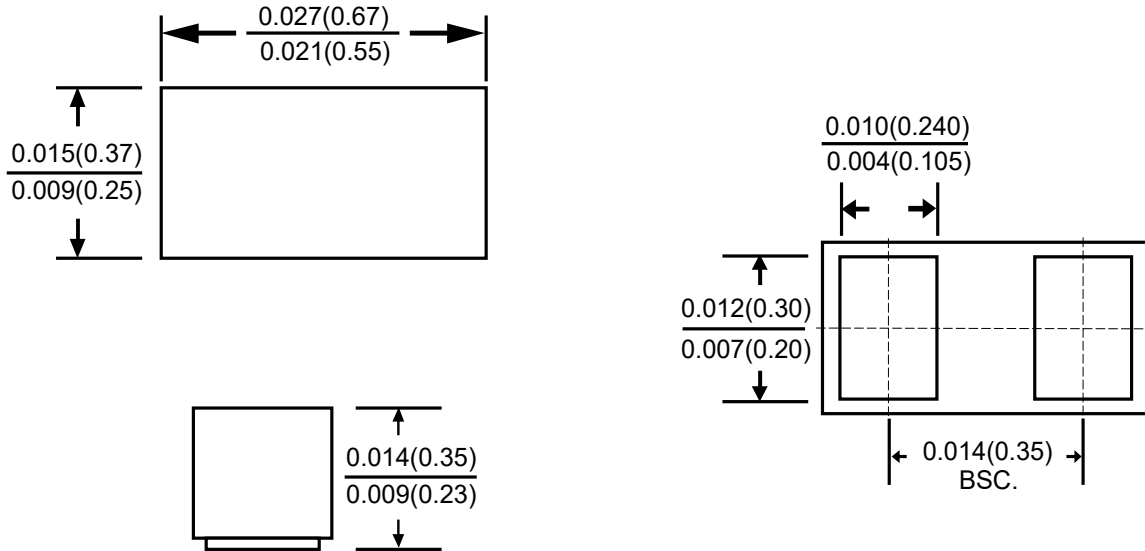
FIG. 4-Clamping Voltage



PACKAGE OUTLINE & DIMENSIONS

YSZ0P2005F2

Package Outline Dimensions



DFN0603-2L

Dimensions in inches and (millimeters)

Suggested Pad Layout

Dimension	Outline	DFN0603-2L (mm)
A		0.82
B		0.20
C		0.36
D		0.31
E		0.51

