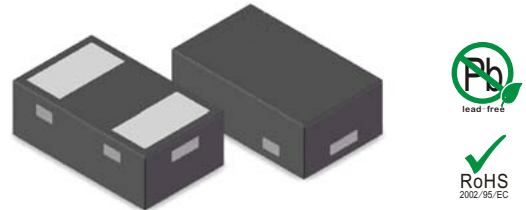


Features

- Ultra small package: 0.6X0.3X0.3mm
- Ultra low capacitance: 0.3pF typical
- Working voltage: 5V
- Low clamping voltage
- 2-pin leadless package
- RoHS compliant



DFN0603

IEC Compatibility (EN61000-4)

- IEC 61000-4-2 (ESD) $\pm 15\text{kV}$ contact $\pm 15\text{kV}$ air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 4A (8/20 μs)

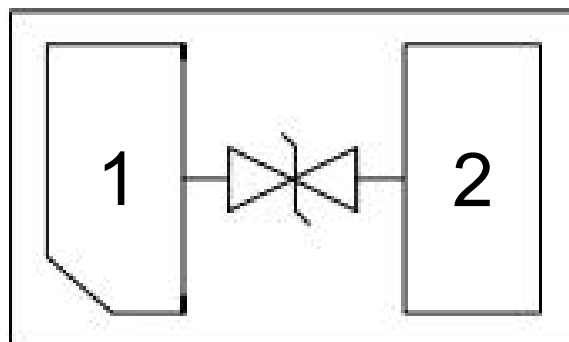
Applications

- High Speed Line :USB1.0/2.0/3.0, VGA, DVI.SDI
- High Definition Multi-Media Interface(HDMI1.3/1.4/2.0)
- Serial and Parallel Ports
- Notebooks, Desktops, Servers
- Peripherals
- Cellular handsets and accessories
- Portable instrumentation

Mechanical Characteristics

- Lead Finish: NiPdAu
- Case Material: "Green" Molding Compound.
- UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 3 per J-STD-020
- Terminal Connections: See Diagram Below

Schematic & PIN Configuration



DFN0603

Absolute Maximum Ratings

Parameter	Symbol	Value	Unit
Peak Pulse Power ($t_P = 8/20\mu s$ waveform)	P_{PP}	100	W
Peak Pulse Current (8/20 μs)	I_{PP}	4	A
ESD per IEC 61000-4-2 (Air)	V_{ESD}	± 15	kV
ESD per IEC 61000-4-2 (Contact)		± 15	
Operating Temperature Range	T_J	-55 to +125	$^{\circ}C$
Storage Temperature Range	T_{STG}	-55 to +150	$^{\circ}C$

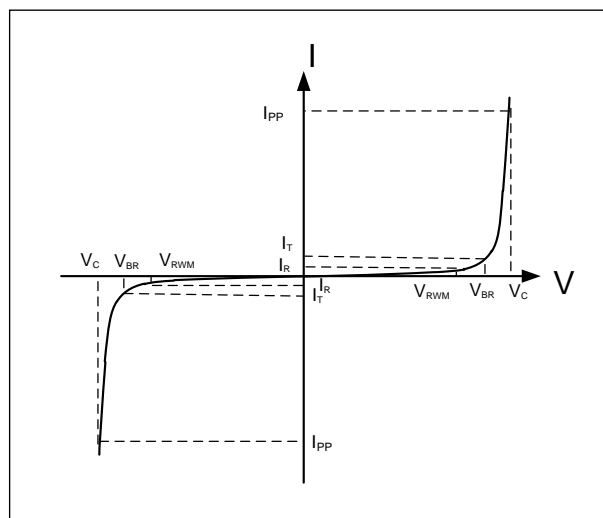
Electrical Characteristics

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Working Voltage	V_{RWM}				5	V
Breakdown Voltage	V_{BR}	$I_T = 1mA$	6			V
Reverse Leakage Current	I_R	$V_{RWM} = 5V$			0.2	μA
Clamping Voltage	V_C	$I_{PP} = 1A$ (8 x 20 μs pulse)			12	V
Clamping Voltage	V_C	$I_{PP} = 4A$ (8 x 20 μs pulse)			25	V
Junction Capacitance	C_J	$V_R = 0V, f = 1MHz$		0.3	0.5	pF

Electrical Parameters (TA = 25 $^{\circ}C$ unless otherwise noted)

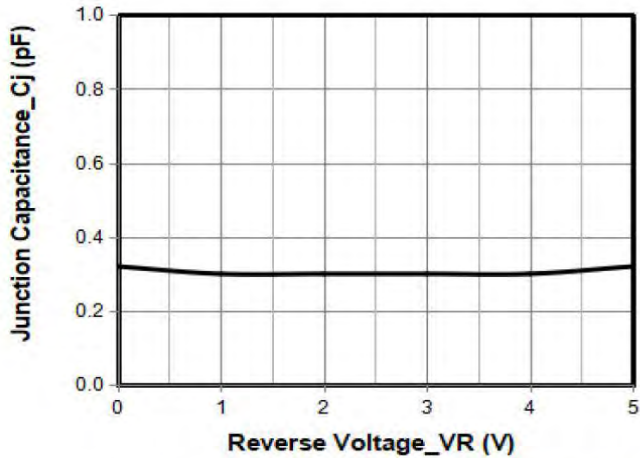
Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current

Note.: 8/20 μs pulse waveform.

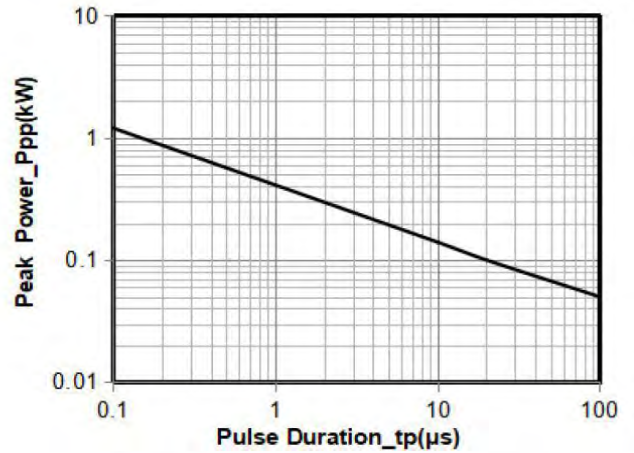


Typical Performance Characteristics

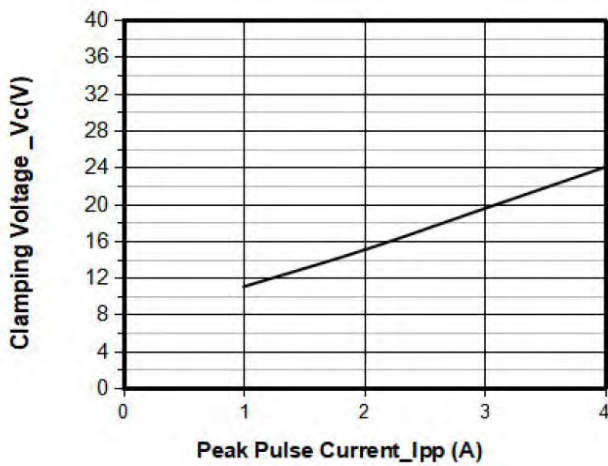
Junction Capacitance vs. Reverse Voltage



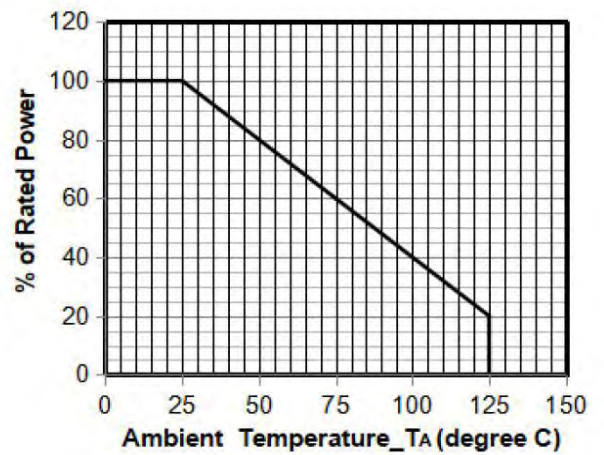
Peak Pulse Power vs. Pulse Time



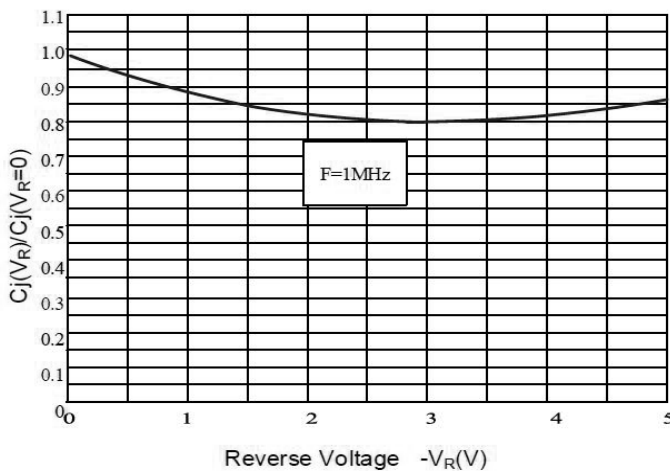
Clamping Voltage vs. Peak Pulse Current



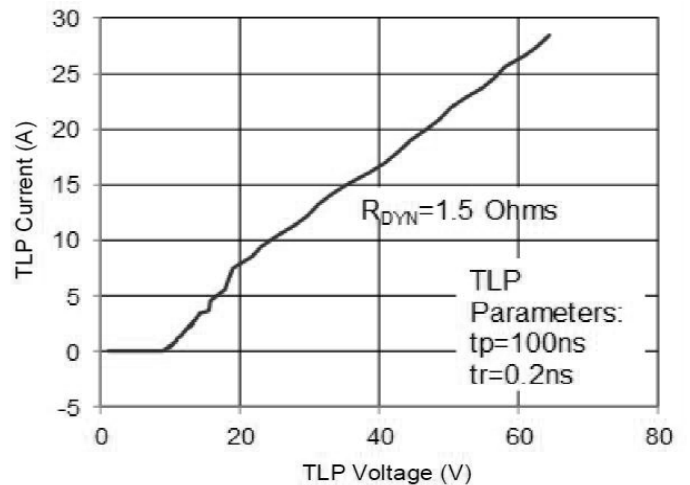
Power Derating Curve



Capacitance vs. Reverse Voltage

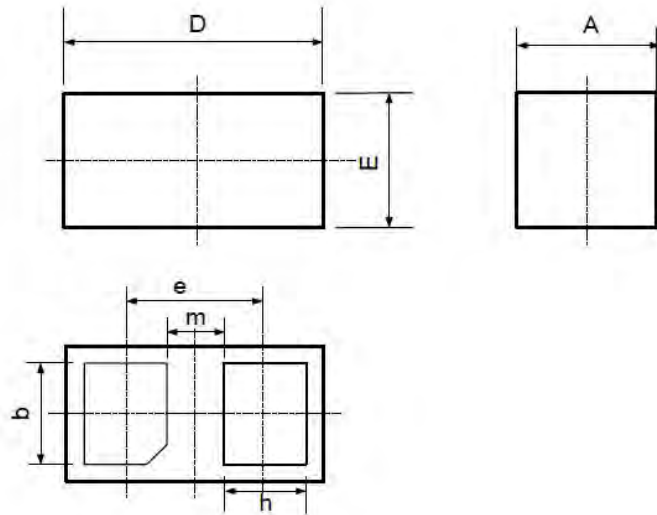


TLP I-V Curve

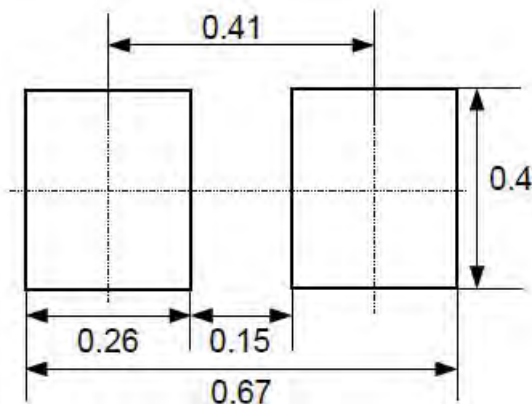


Package Mechanical Data

SYM	DIMENSIONS	
	MILLIMETERS	
	MIN	MAX
A	0.280	0.320
D	0.550	0.650
E	0.250	0.350
b	0.200	0.300
e	0.350	
m	0.165	
h	0.070	0.170



Suggested Land Pattern



Ordering Information

Order code	Package	Base qty	Delivery mode
PTN062L05S5B10	DFN0603	15K	Tape and reel