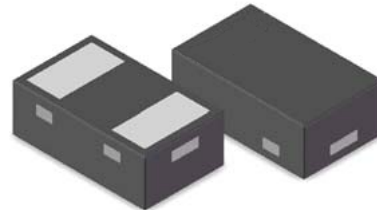


Features

- Ultra small package: 0.6X0.3X0.3mm
- Ultra low capacitance: 6pF 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) 5A (8/20 μs)

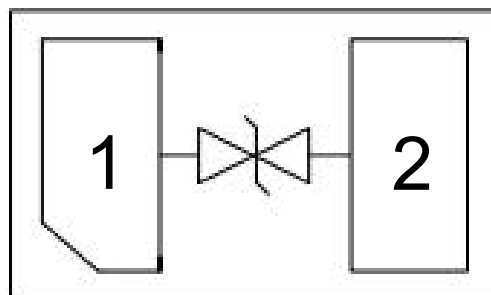
Applications

- Cellular Handsets and Accessories
- Personal Digital Assistants
- Notebooks and Handhelds
- Portable Instrumentation
- Digital Cameras
- Peripherals
- Audio Players
- Keypads, Side Keys, USB 2.0, LCD Displays

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}	90	W
Peak Pulse Current (8/20 μs)	I_{PP}	5	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	$^{\circ}C$

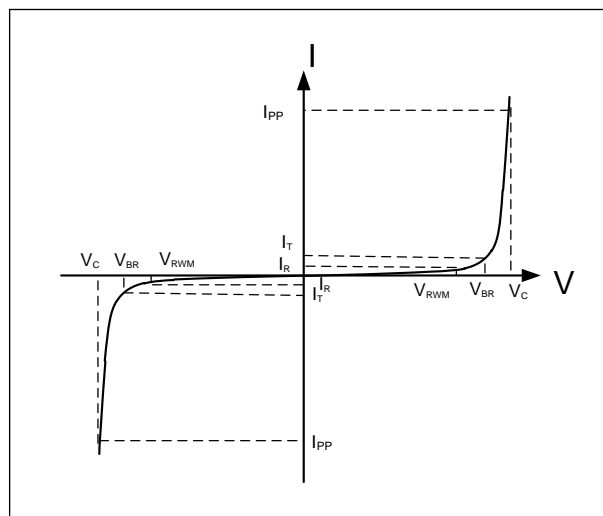
Electrical Characteristics

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Working Voltage	V_{RWM}				5	V
Breakdown Voltage	V_{BR}	$I_T = 1mA$	6			V
Punch-through Voltage	V_{PT}	$I_T = 1mA$	7			V
Snap-Back Voltage	V_{SB}	$I_{SB} = 50mA$	5.6			V
Reverse Leakage Current	I_R	$V_{RWM} = 5V$			0.05	μA
Clamping Voltage	V_C	$I_{PP} = 1A$ (8 x 20 μs pulse)			9.5	V
Clamping Voltage	V_C	$I_{PP} = 5A$ (8 x 20 μs pulse)		13	15	V
Junction Capacitance	C_J	$V_R = 0V$, $f = 1MHz$		6		pF

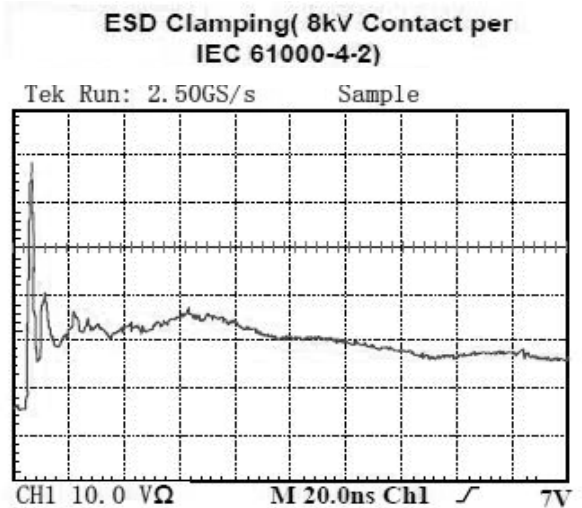
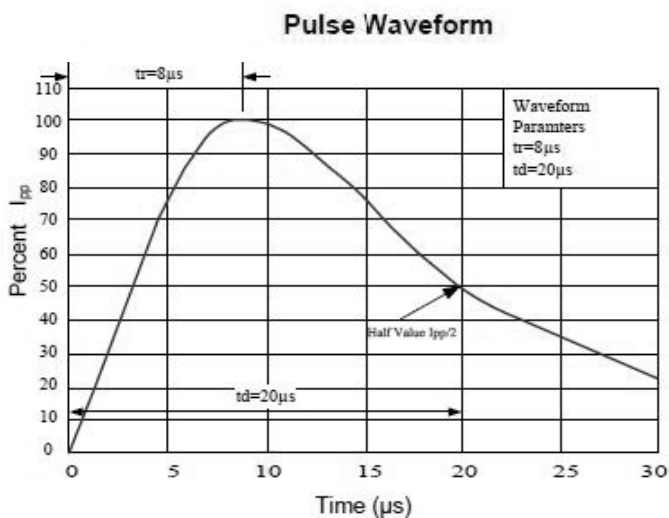
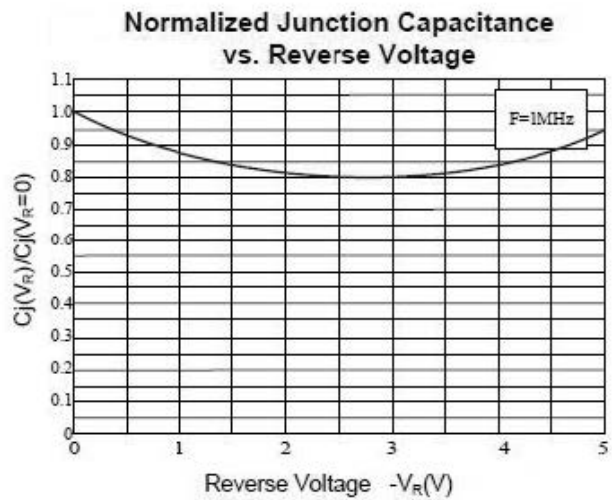
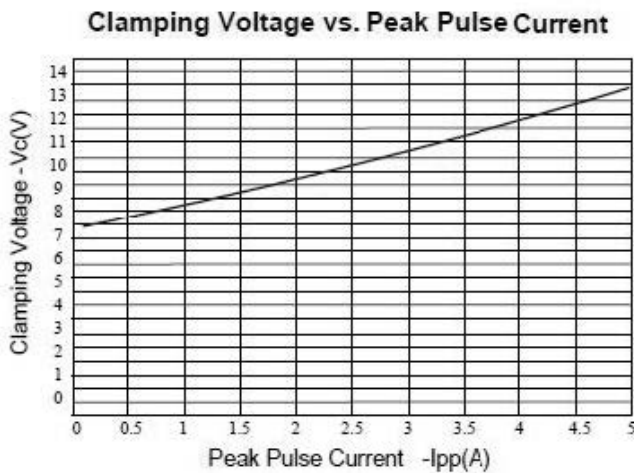
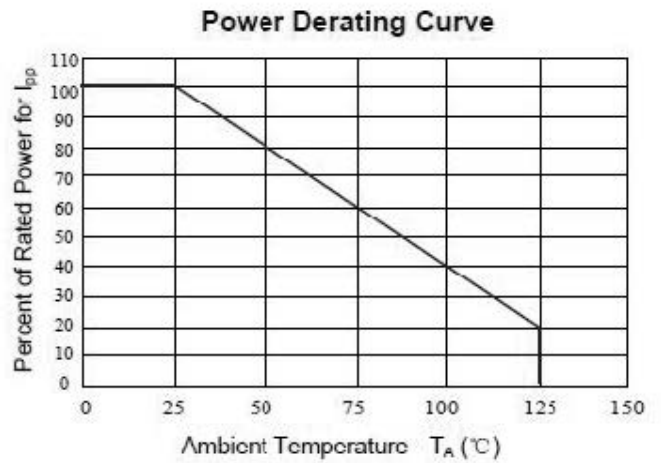
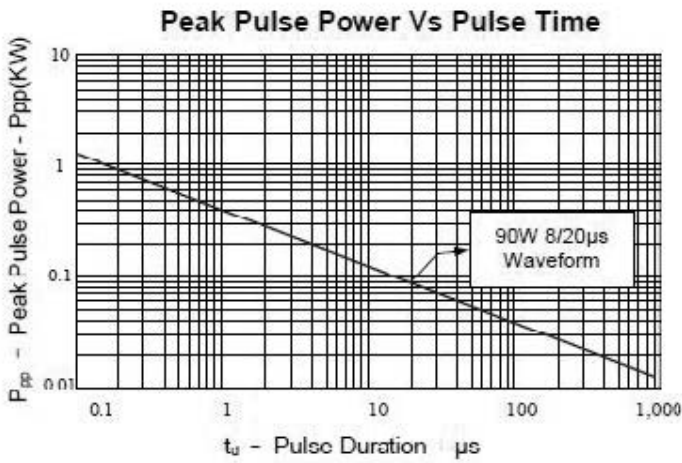
Electrical Parameters (TA = 25 $^{\circ}C$ unless otherwise noted)

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.

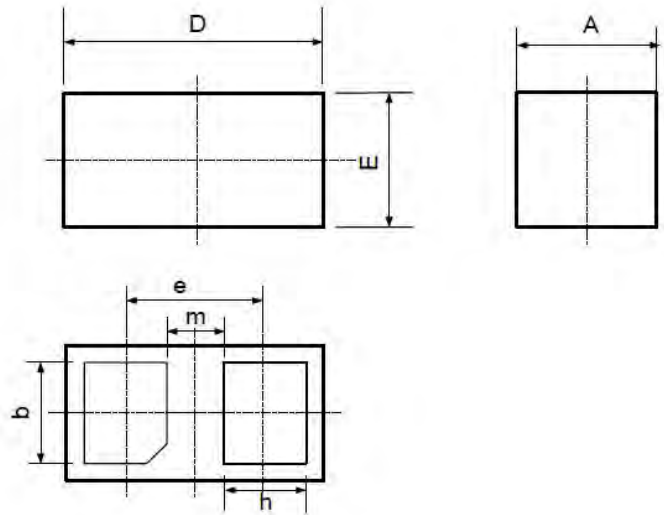


Typical Performance Characteristics

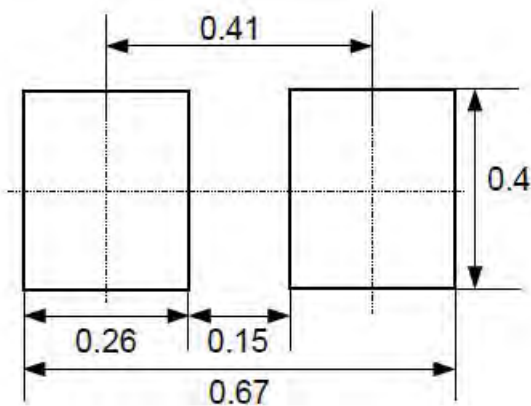


Package Mechanical Data

SYM	DIMENSIONS	
	MILLIMETERS	
	MIN	MAX
A	0.230	0.330
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
PTN062L6S5B9	DFN0603	15K	Tape and reel