

Features

- * ESD and surge protection for USB Voltage Bus to
 - IEC 61000-4-2 (ESD) immunity test
 - Air discharge: $\pm 30\text{kV}$
 - Contact discharge: $\pm 30\text{kV}$
 - IEC61000-4-5 (Lightning) 80A (8/20 μs)
 - IEC61000-4-4 (EFT) 40A (5/50 μs)
- * RoHS Compliant

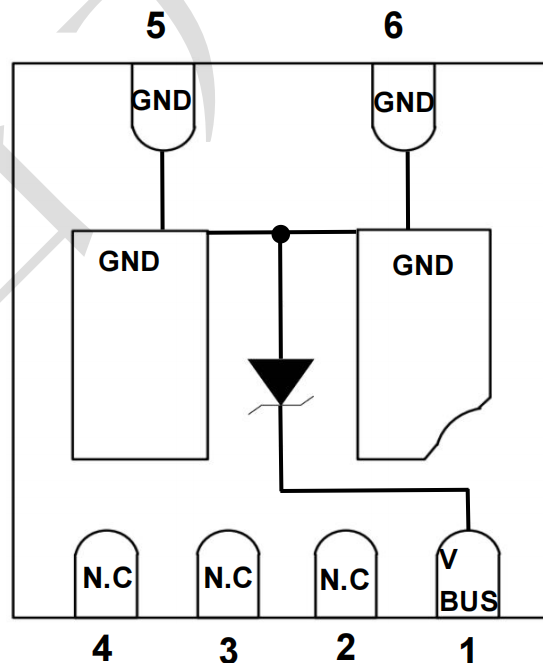
Mechanical Characteristics

- * Package: SLP2018P6 Package
- * Lead Finish: Matte Tin
- * Case Material: "Green" Molding Compound.
- * UL Flammability Classification Rating 94V-0
- * Moisture Sensitivity: Level 3 per J-STD-020
- * Terminal Connections: See Diagram Below
- * Shipping Qty :10000 /13Inch Tape & Reel

Applications

- * Personal Digital Assistants
- * Notebooks and Handhelds
- * Portable Instrumentation

Dimensions and Pin Configuration



Bottom View

Absolute Maximum Ratings (Tamb=25°C unless otherwise specified)

VBUS TVS

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	Ppk	3000	W
Peak Pulse Current (8/20μs)	IPP	80	A
ESD per IEC 61000-4-2 (Air)	VESD	±30	kV
ESD per IEC 61000-4-2 (Contact)		±30	
Operating Temperature Range	TJ	-55 to +125	°C
Storage Temperature Range	Tstg	-55 to +150	°C

Electrical Characteristics (TA=25°C unless otherwise specified)

VBUS TVS (Pin 1)

Pin 1 to GND

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	VRWM			22	V	
Breakdown Voltage	VBR	24			V	IT = 1mA
Reverse Leakage Current	IR			0.3	μA	VRWM = 22 V
Forward Voltage	VF		0.8	1.2	V	IF=10mA
Clamping Voltage	VC			35	V	IPP = 10A (8 x 20μs pulse)
Clamping Voltage	VC		40	45	V	IPP = 58A (8 x 20μs pulse)
Junction Capacitance	CJ			900	pF	VR = 0V, f = 1MHz

Typical Performance Characteristics (TA=25°C unless otherwise Specified)

Fig1. 8/20μs Pulse Waveform

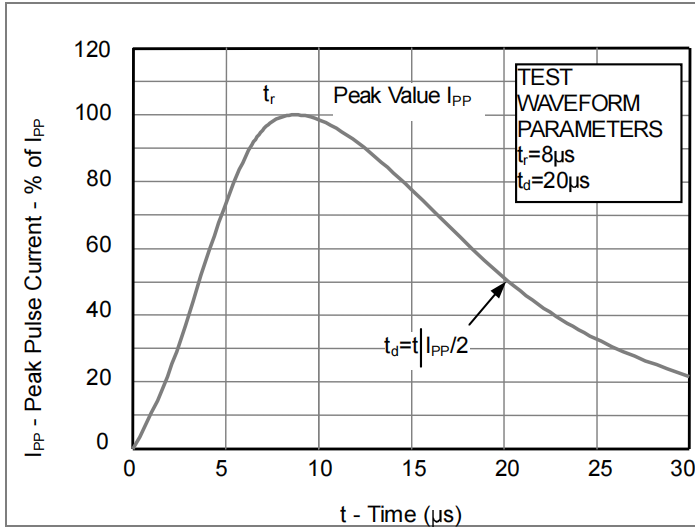


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

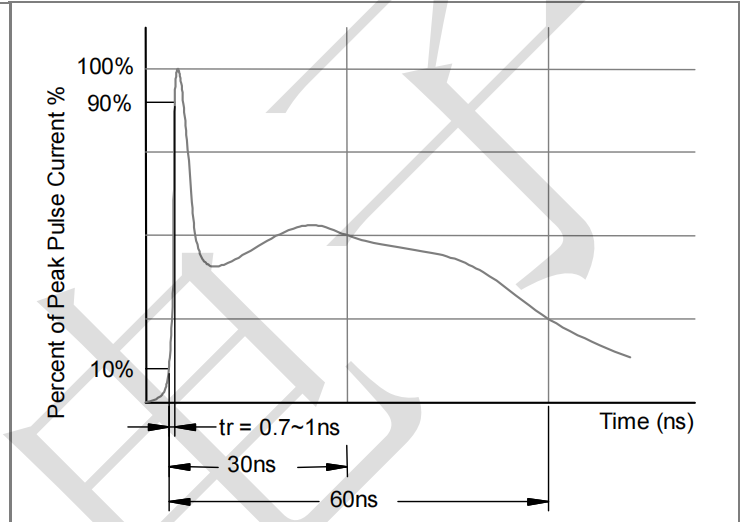
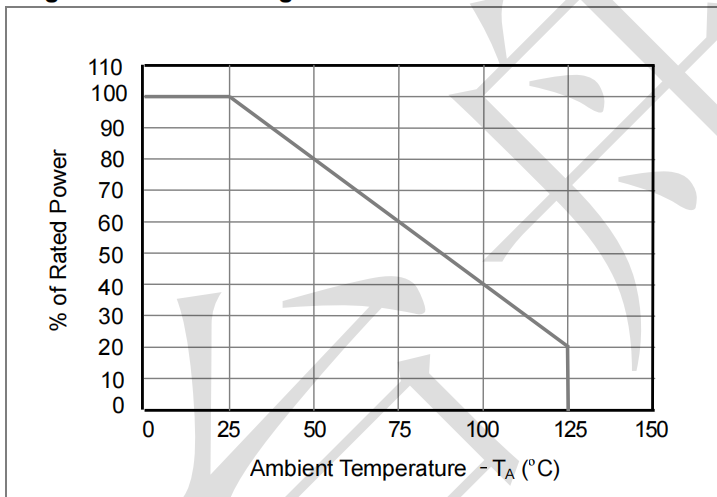


Fig3. Power Derating Curve



Outline Drawing - SLP2018P6

