

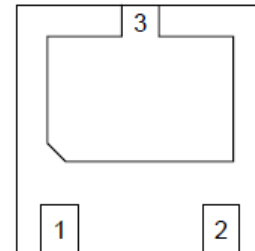
Features

- 4000W peak pulse power (8/20μs)
- Low leakage: nA level
- Low operating voltage: 12V
- Ultra low clamping voltage
- One power line protects
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
Air discharge: ±30kV
Contact discharge: ±30kV
 - IEC61000-4-4 (EFT) 80A (5/50ns)
 - IEC61000-4-5 (Lightning) 130A (8/20μs)
- RoHS Compliant

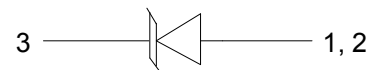
Applications

- Power Management
- Industrial Application
- Power Supply Protection

Dimensions DFN2020-3



Pin Configuration



Mechanical Characteristics

- Package: DFN2020-3
- 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
- Marking Information: See Below

Absolute Maximum Ratings (T_{amb}=25°C unless otherwise specified)

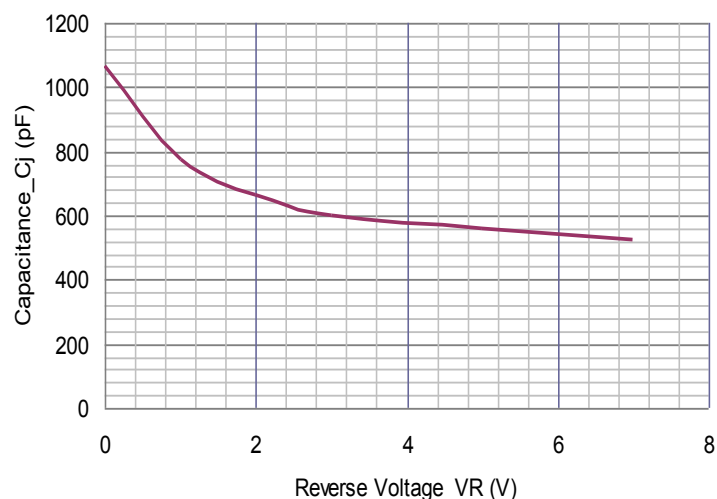
Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	P _{pp}	4000	W
ESD per IEC 61000-4-2 (Air)	V _{ESD}	±30	Kv
ESD per IEC 61000-4-2 (Contact)		±30	
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{STJ}	-55 to +150	°C

Electrical Characteristics

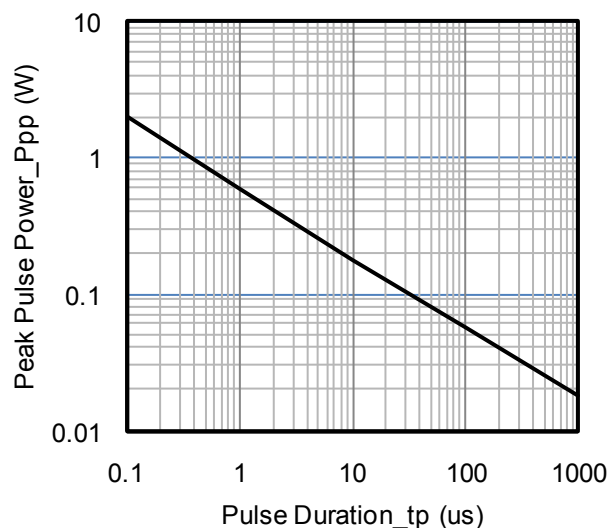
(TA=25°C unless otherwise specified)

Part Number	Device Marking	V _{RWM} (V)	V _{BR} (V)	I _T (mA)	V _C @20A	V _C		I _R μA (Max)	C (Pf) (Typ.)
						(Max)	(@A)		
SD1201P4-3	12P	12	14	1	18	30	130	1	450

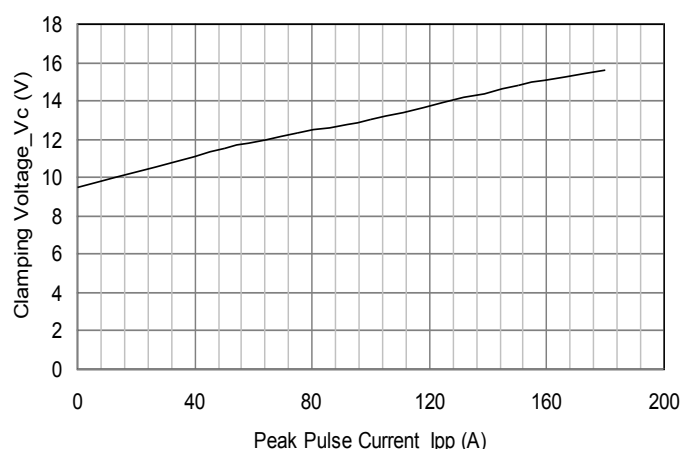
Typical Performance Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise Specified)



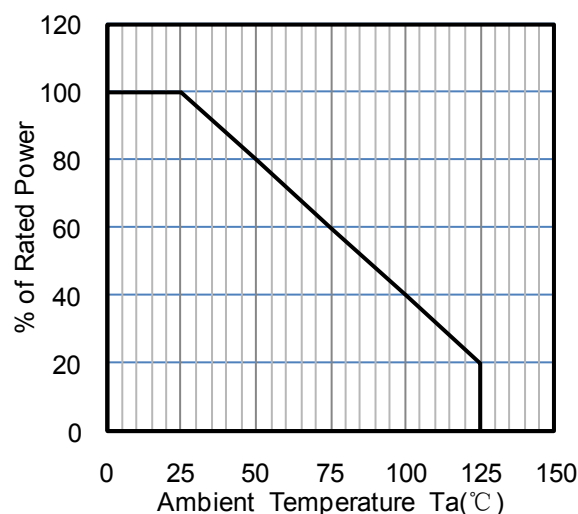
Junction Capacitance vs. Reverse Voltage



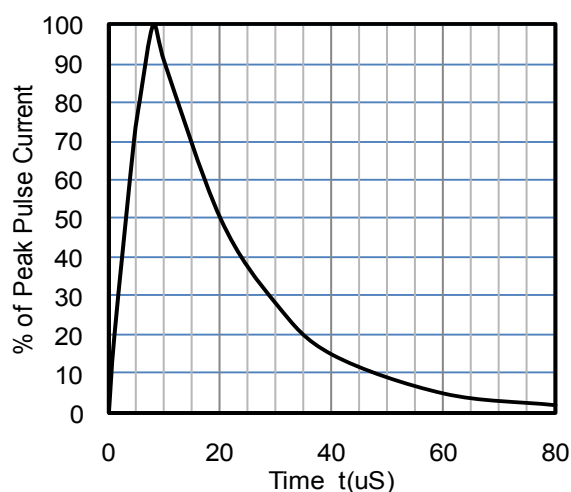
Peak Pulse Power vs. Pulse Time



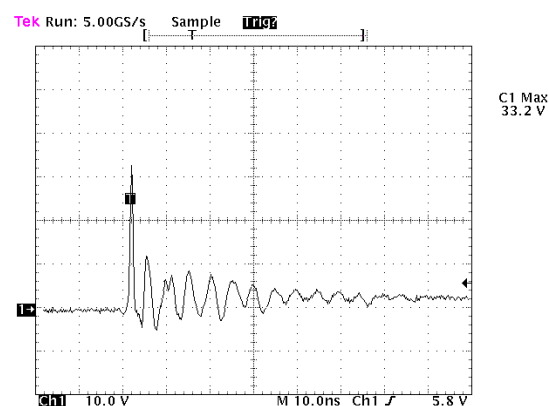
Clamping Voltage vs. Peak Pulse Current



Power Derating Curve



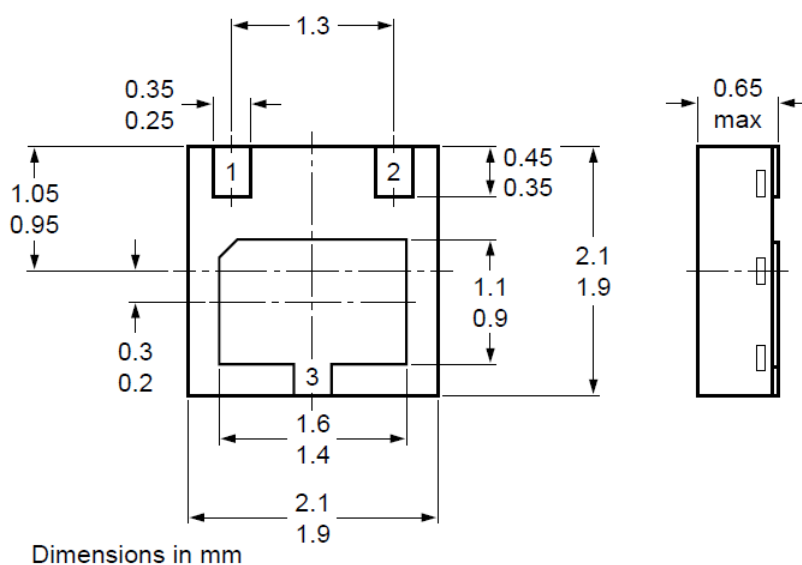
8 X 20 μs Pulse Waveform



ESD Clamping Voltage

8 kV Contact per IEC61000-4-2

DFN2020-3 Package Outline Drawing



Suggested Land Pattern

