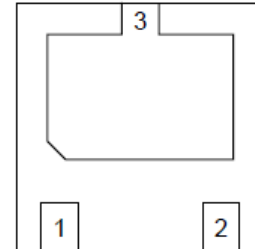


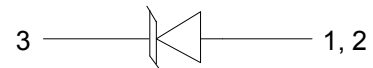
Features

- 6500W peak pulse power (8/20uS)
- Low leakage: nA level
- Operating voltage: 15V
- Ultra low clamping voltage
- One power line protects
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
 - Air discharge: $\pm 30\text{kV}$
 - Contact discharge: $\pm 30\text{kV}$
 - IEC61000-4-5 (Lightning) 180A (8/20uS)
- RoHS Compliant

Dimensions DFN2020-3



Pin Configuration



Applications

- Power Management
- Industrial Application
- Power Supply Protection

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

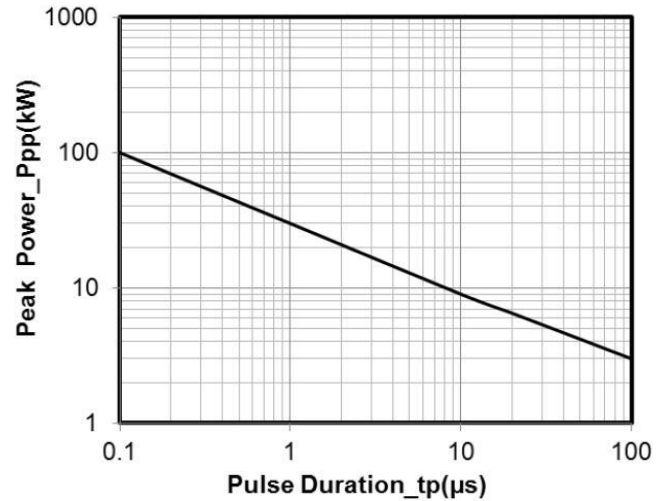
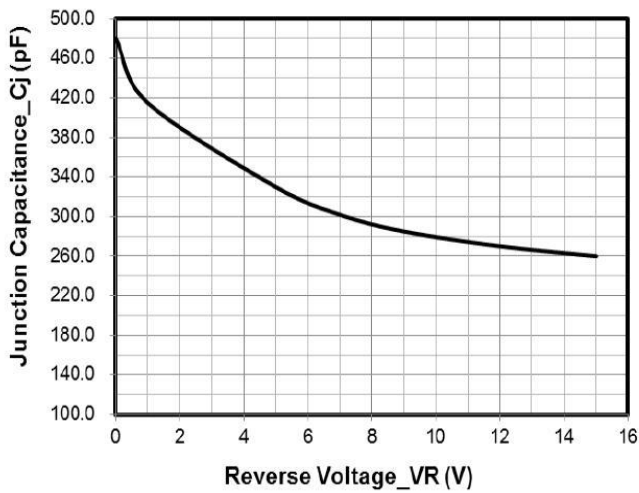
Absolute Maximum Ratings (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	P _{pp}	6500	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

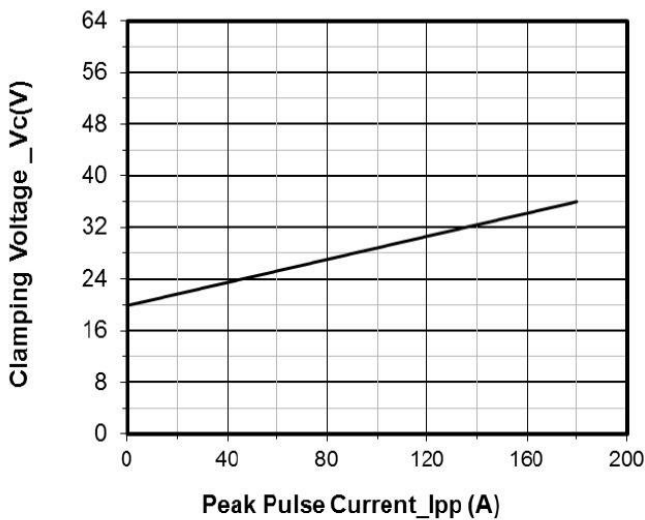
Electrical Characteristics (TA=25°C unless otherwise specified)

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)		
SD1501P4-3	N15A	15	16.5	1	21	36	180	1	480

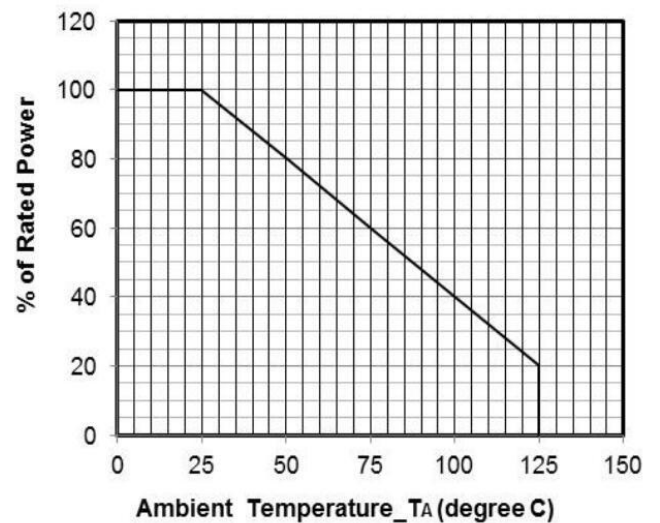
Typical Performance Characteristics ($T_A=25^\circ\text{C}$ unless otherwise Specified)



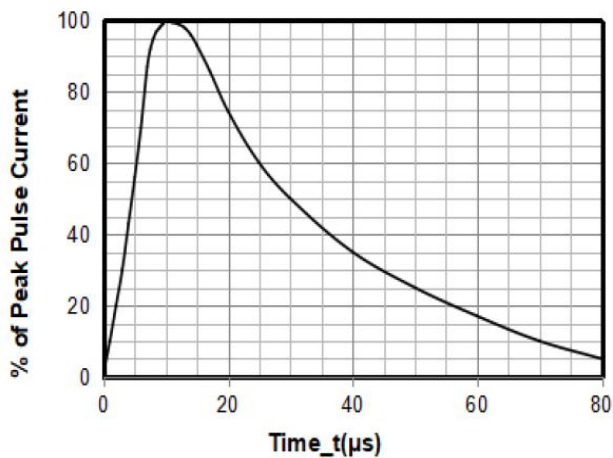
Novction Capacitance vs. Reverse Voltage



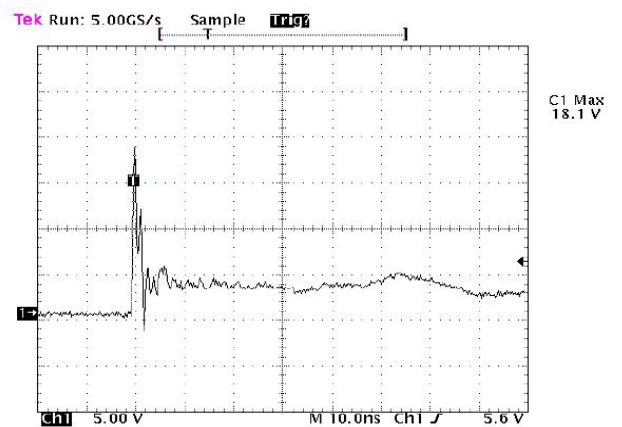
Peak Pulse Power vs. Pulse Time



Clamping Voltage vs. Peak Pulse Current



Power Derating Curve



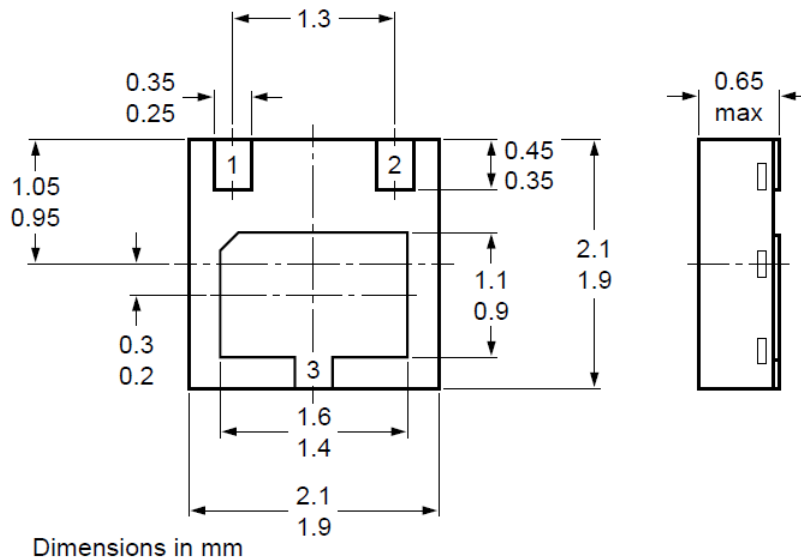
Note: Data is taken with a 10x attenuator

ESD Clamping Voltage

8 kV Contact per IEC61000-4-2

8 X 20 μs Pulse Waveform

DFN2020-3 Package Outline Drawing



Suggested Land Pattern

