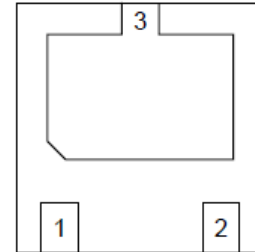


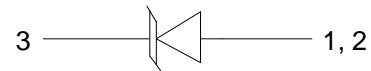
### Features

- 4200W peak pulse power (8/20 $\mu$ S)
- 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:  $\pm 30$ kV  
Contact discharge:  $\pm 30$ kV
  - IEC61000-4-5 (Lightning) 180A (8/20 $\mu$ S)
- 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
- Quantity Per Reel:3,000pcs
- Device Marking: 15P

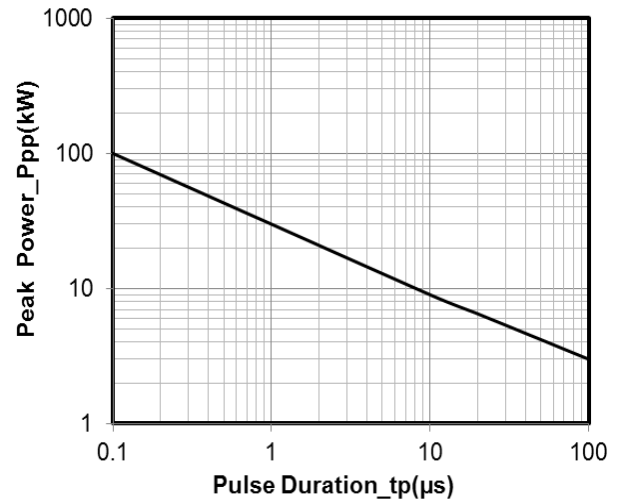
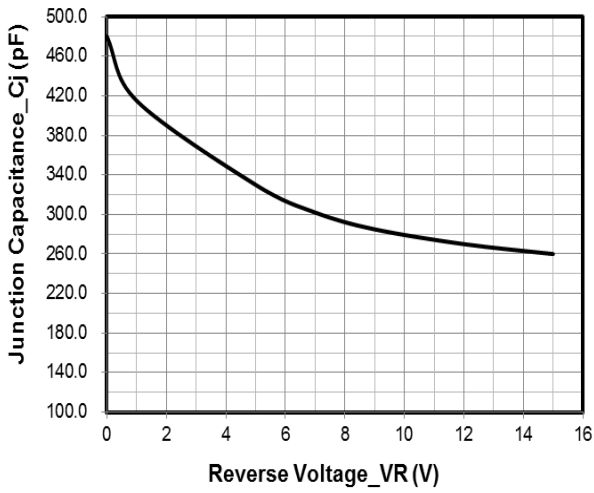
### Absolute Maximum Ratings (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 $\mu$ s)	Ppk	6500	W
Peak Pulse Current (8/20 $\mu$ s)	IPP	180	A
ESD per IEC 61000-4-2 (Air)	VESD	$\pm 30$	kV
ESD per IEC 61000-4-2 (Contact)		$\pm 30$	
Operating Temperature Range	TJ	-55 to +125	°C
Storage Temperature Range	Tstg	-55 to +150	°C

**Electrical Characteristics**( $T_A=25^{\circ}\text{C}$  unless otherwise specified)

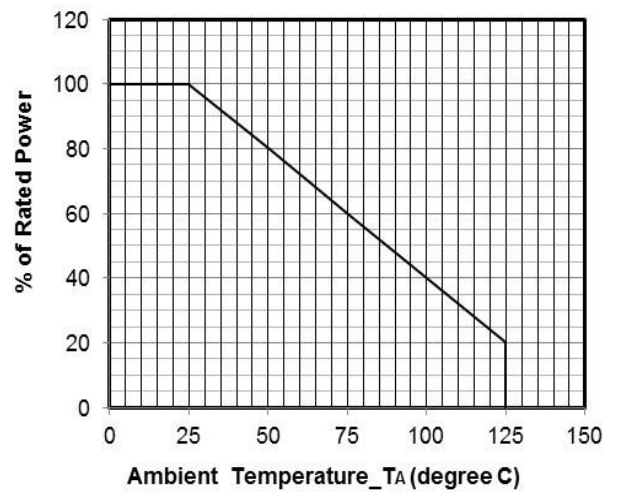
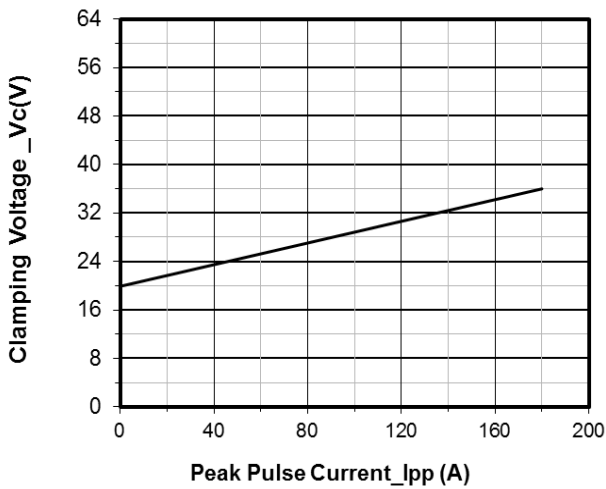
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Working Voltage	$V_{RWM}$				15	V
Breakdown Voltage	$V_{BR}$	$I_T = 1\text{mA}$	16.5			V
Reverse Leakage Current	$I_R$	$V_{RWM} = 15\text{V}$			1.0	$\mu\text{A}$
Clamping Voltage	$V_C$	$I_{PP} = 20\text{A}$ (8 x 90 $\mu\text{s}$ pulse)			21	V
Clamping Voltage	$V_C$	$I_{PP} = 180\text{A}$ (8 x 20 $\mu\text{s}$ pulse)			28	V
Junction Capacitance	$C_J$	$V_R = 0\text{V}$ , $f = 1\text{MHz}$		480		pF

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



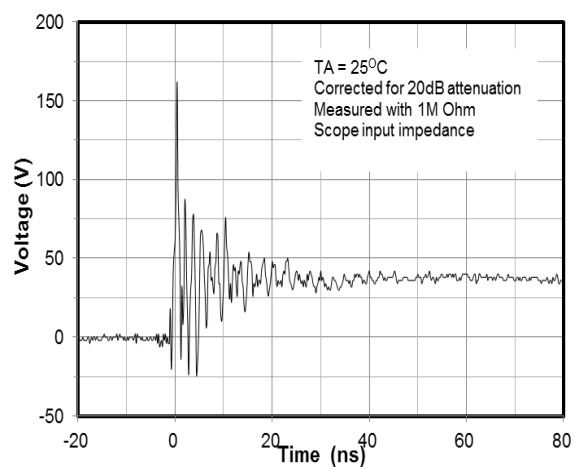
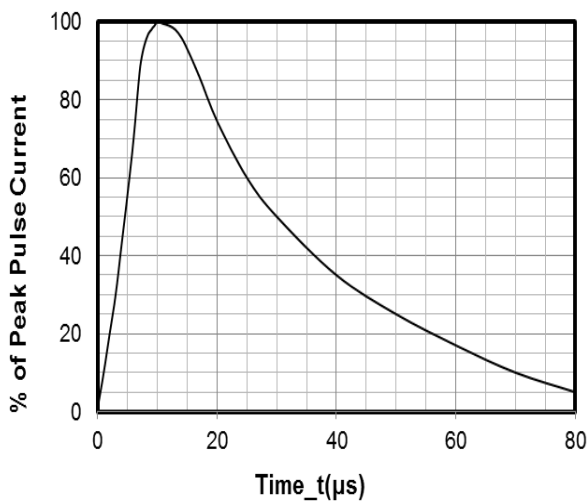
Novction Capacitance vs. Reverse Voltage

Peak Pulse Power vs. Pulse Time



Clamping Voltage vs. Peak Pulse Current

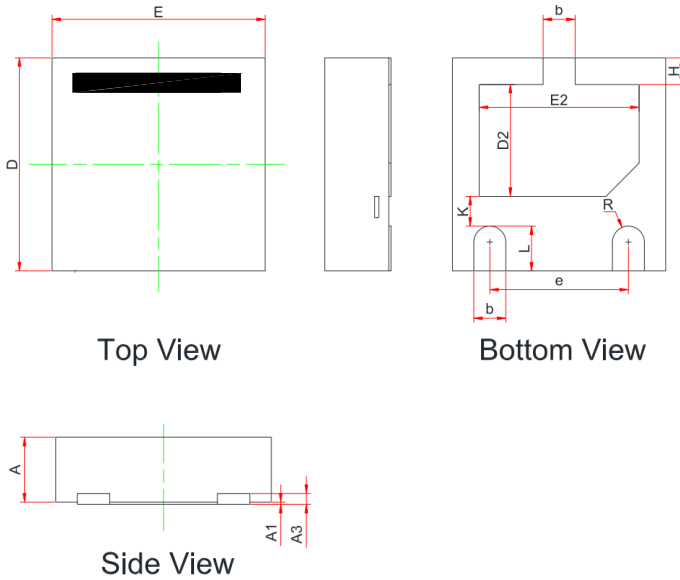
Power Derating Curve



8 X 20 $\mu\text{s}$  Pulse Waveform

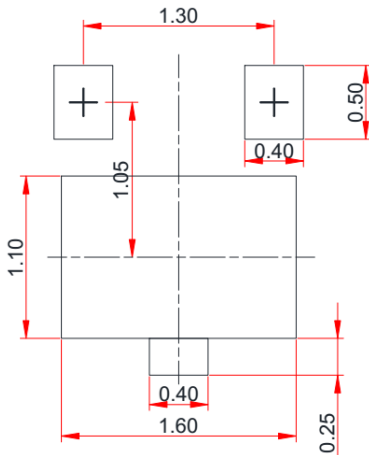
8 kV Contact per IEC61000-4-2

DFN2020-3 Package Outline Drawing



	MILLIMETERS		
	MIN	NOM	MAX
A	0.55	0.60	0.65
A1	0.00	0.02	0.05
A3	0.10REF.		
b	0.25	--	0.35
D	1.90	--	2.10
E	1.90	--	2.10
D2	0.95	--	1.15
E2	1.40	--	1.60
e	1.20		1.40
H	0.20	--	0.30
K	0.20		0.40
L	0.35	--	0.45
R	0.13	--	--

Suggested Land Pattern



单位: mm