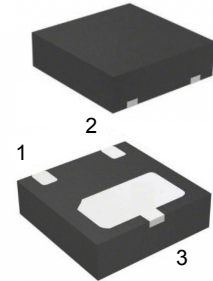
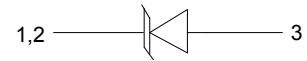


Features

- 6400W peak pulse power (8/20μs)
- Low leakage: nA level
- Operating voltage: 24V
- 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
 - IEC 61000-4-5 (Lightning) 200A (8/20μs)
- RoHS Compliant



DFN2020-3L



Schematic Diagram

Applications

- Power management
- Industrial application
- Power supply protection

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

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	P _{pk}	6400	W
Peak Pulse Current (8/20μs)	I _{pp}	200	A
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 _{stg}	-55 to +150	°C

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

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Working Voltage	V _{RWM}	-	-	-	24	V
Breakdown Voltage	V _{BR}	I _T =1mA	25	-	-	V
Reverse Leakage Current	I _R	V _{RWM} =24V	-	-	0.5	μA
Clamping Voltage	V _C	I _{pp} =1A (8 x 20μs pulse)	-	-	30	V
		I _{pp} =200A (8 x 20μs pulse)	-	-	32	
Junction Capacitance	C _J	V _R =0V, F=1MHz	-	-	800	pF

Typical Characteristic Curves

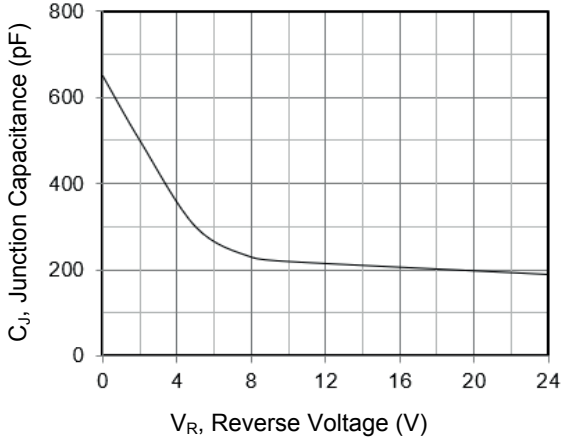


Figure 1. Junction Capacitance vs. Reverse Voltage

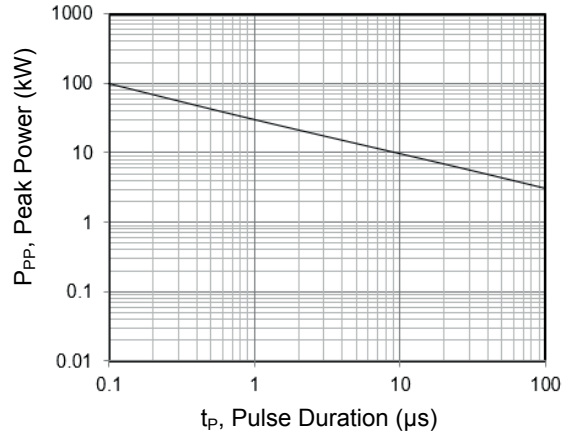


Figure 2. Peak Pulse Power vs. Pulse Time

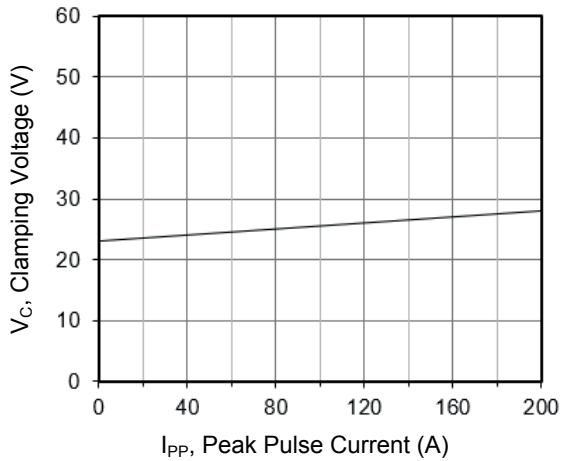


Figure 3. Clamping Voltage vs. Peak Pulse Current
 ($t_p=8/20\mu s$)

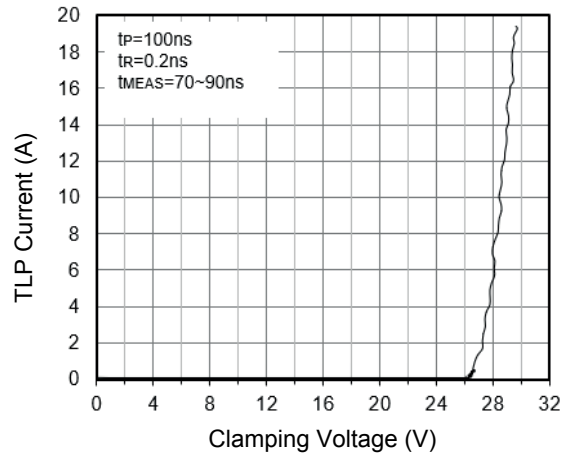


Figure 4. TLP Measurement

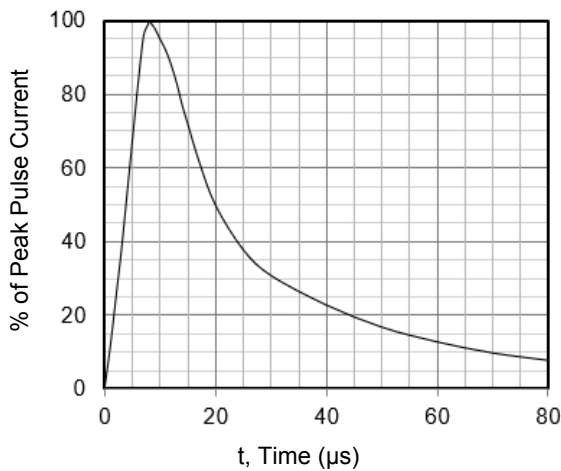


Figure 5. 8 X 20μs Pulse Waveform

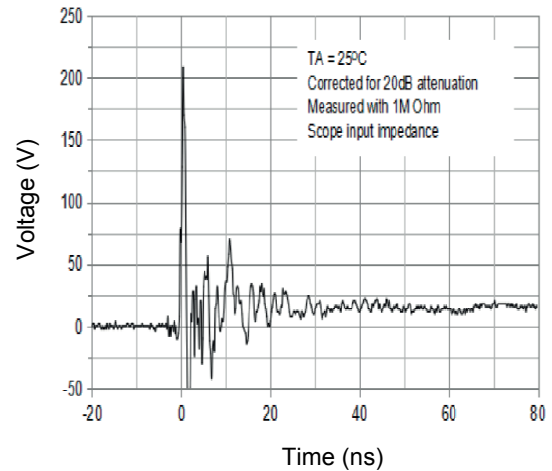
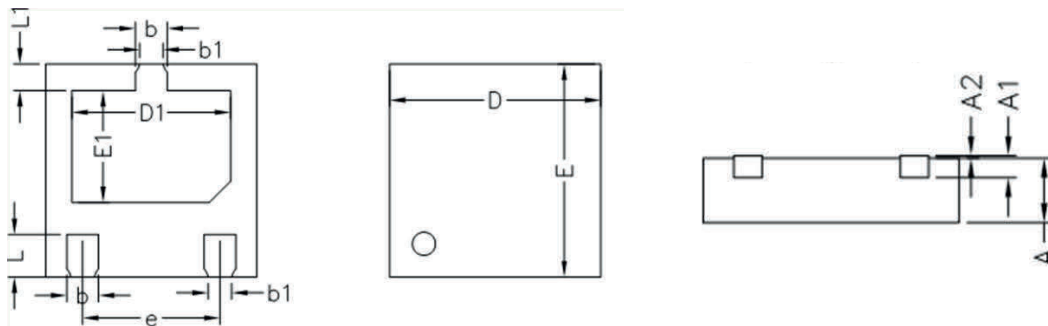


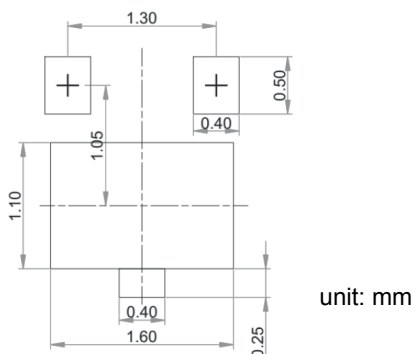
Figure 6. ESD Clamping Voltage
 8kV Contact per IEC61000-4-2

Package Outline Dimensions (DFN2020-3L)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.45	0.60	0.018	0.024
A1	0.15 REF		0.006 REF	
A2	0.00	0.05	0.000	0.002
b	0.25	0.35	0.010	0.014
b1	0.22 REF		0.009 REF	
D	1.95	2.05	0.077	0.081
D1	1.45	1.55	0.057	0.061
E	1.95	2.05	0.077	0.081
E1	1.00	1.10	0.039	0.043
e	1.30 BSC		0.051 BSC	
L	0.35	0.45	0.014	0.018
L1	0.20	0.30	0.008	0.012

Recommended Pad Layout



Order Information

Device	Package	Marking	Carrier	Quantity
GSEPP24U8000	DFN2020-3L	616124	Tape & Reel	3,000 pcs / Reel