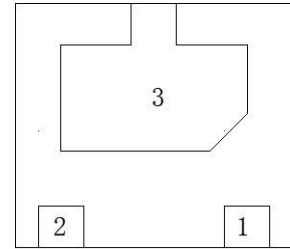


### FEATURES:

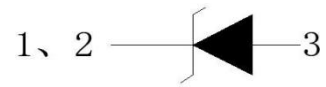
- ✧ Protects one uni-directional I/O line
- ✧ Low clamping voltage
- ✧ Low operating voltage: 30.0V
- ✧ ROHS compliant
- ✧ Compliant to Halogen - free



DFN2020-3

### MAIN APPLICATIONS

- ✧ Power Managemet
- ✧ Industrial Application
- ✧ Power Supply Protection



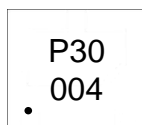
PIN Configuration

### PROTECTION SOLUTION TO MEET

- ✧ IEC61000-4-2 (ESD)  $\pm 30\text{kV}$  (air),  $\pm 30\text{kV}$  (contact)
- ✧ IEC61000-4-5 (Lightning) 180A (8/20us)

### MECHANICAL CHARACTERISTICS

- ✧ Package :DFN2020-3
- ✧ Molding Compound Flammability Rating : UL 94V-O
- ✧ Quantity Per Reel : 3,000pcs
- ✧ Lead Finish : Lead Free
- ✧ Marking Code:



### ABSOLUTE MAXIMUM RATINGS ( $T_A=25^\circ\text{C}$ , RH=45%-75%, unless otherwise noted)

Parameter	Symbol	Value	Unit
Storage temperature range	$T_{\text{stg}}$	-55 to +150	$^\circ\text{C}$
Operating junction temperature range	$T_j$	-55 to +125	$^\circ\text{C}$
Lead Soldering Temperature	$T_L$	260 (10 sec.)	$^\circ\text{C}$
Peak pulse power dissipation on 8/20 $\mu\text{s}$ waveform	$P_{\text{PP}}$	6000	W
ESD per IEC 61000-4-2 (Air)	$V_{\text{ESD}}$	+/- 30	kV
ESD per IEC 61000-4-2 (Contact)		+/- 30	

### ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Reverse Working Voltage	V <sub>R</sub>				30.0	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>T</sub> = 1mA	31.0		35.0	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> = 30V			1.0	μA
Peak Pulse Current	I <sub>pp</sub>	t <sub>p</sub> = 8/20μs			180	A
Clamping Voltage	V <sub>C</sub>	I <sub>pp</sub> = 180A, t <sub>p</sub> = 8/20μs			35	V
Junction Capacitance	C <sub>J</sub>	V <sub>R</sub> = 0V, f = 1MHz			650	pF

### Typical Performance Characteristics (T<sub>A</sub>=25°C, unless otherwise noted)

Figure 1: Peak Pulse Power vs. Pulse Time

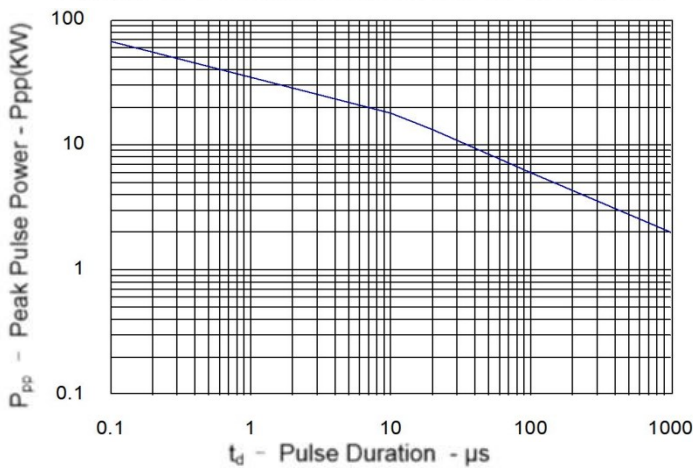


Figure 2: Power Derating Curve

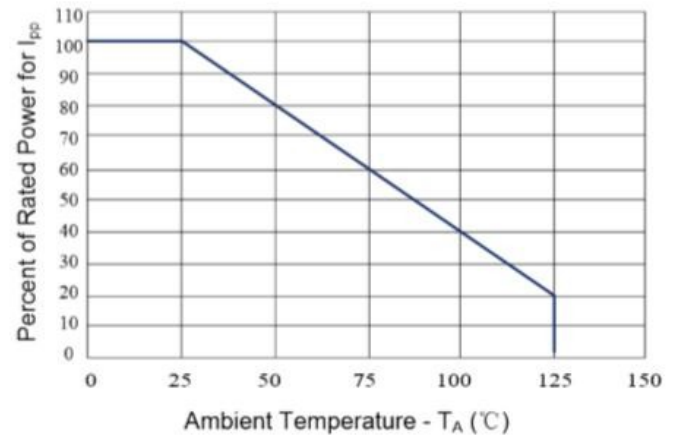


Figure 3: Clamping Voltage vs. Peak Pulse Current

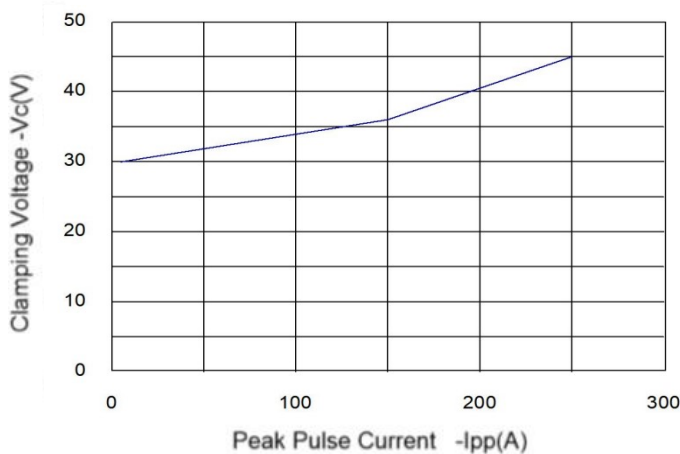
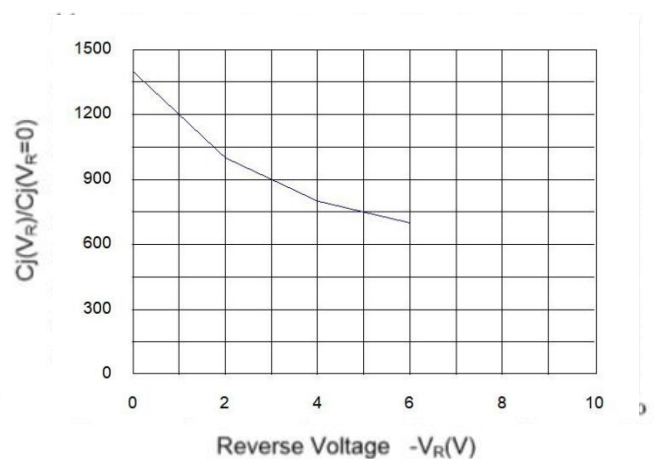
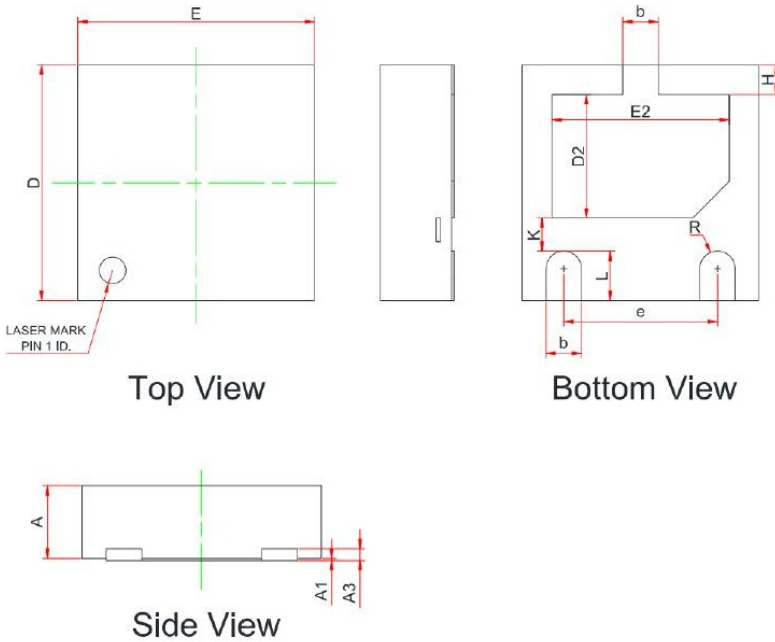


Figure 4: Normalized Junction Capacitance vs. Reverse Voltage



### PACKAGE MECHANICAL DATA



SYM	DIMENSIONS		
	MILLIMETERS		
	MIN	NOM	MAX
A	0.50	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

