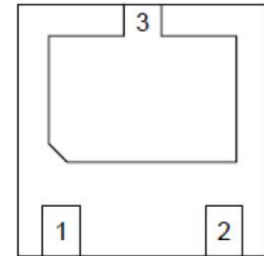


FEATURES:

- ✧ Protects one uni-directional I/O line
- ✧ Low clamping voltage
- ✧ Low operating voltage: 18.0V
- ✧ ROHS compliant
- ✧ Compliant to Halogen-free
- ✧ Suffix "-Q1" for AEC-Q101



DFN2020-3

MAIN APPLICATIONS

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



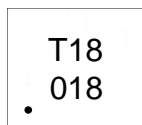
PIN Configuration

PROTECTION SOLUTION TO MEET

- ✧ IEC61000-4-2 (ESD) $\pm 30\text{kV}$ (air), $\pm 30\text{kV}$ (contact)
- ✧ IEC61000-4-5 (Lightning) 150A (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:



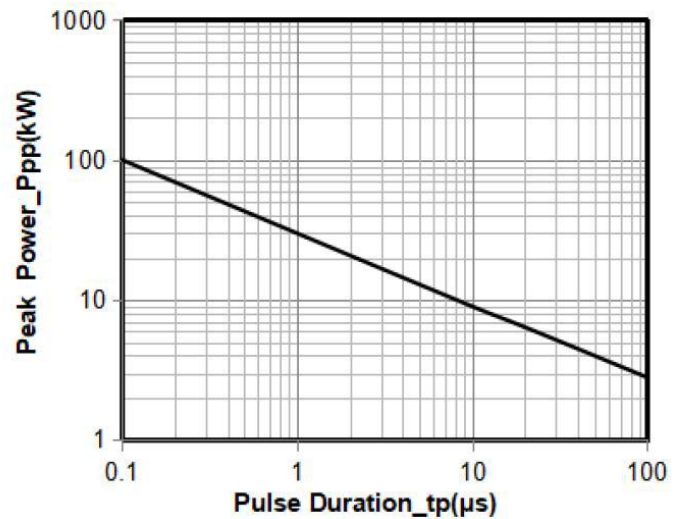
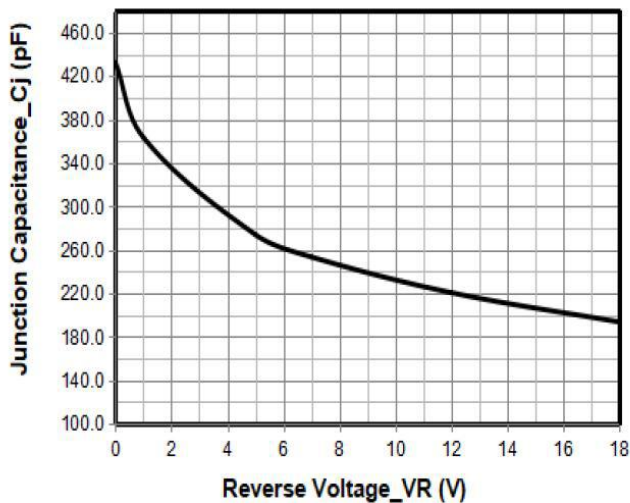
ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$, RH=45%-75%, unless otherwise noted)

Parameter	Symbol	Value	Unit
Storage temperature range	T_{stg}	-55 to +150	$^\circ\text{C}$
Operating junction temperature range	T_j	-55 to +125	$^\circ\text{C}$
Peak pulse power dissipation on 8/20 μs waveform	P_{PP}	6400	W
ESD per IEC 61000-4-2 (Air)	V_{ESD}	+/- 30	kV
ESD per IEC 61000-4-2 (Contact)		+/- 30	

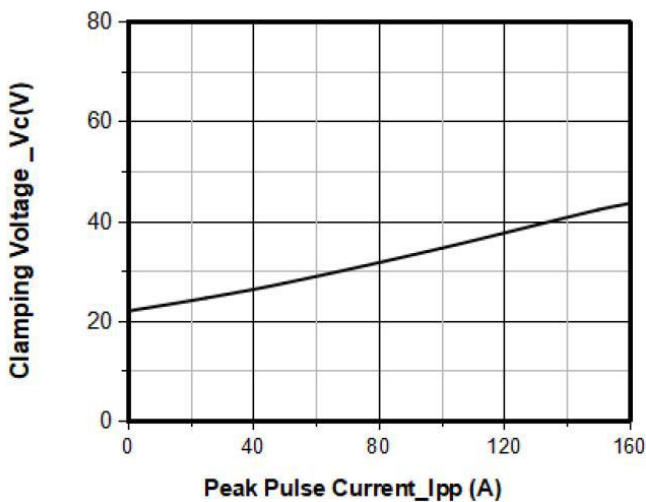
ELECTRICAL CHARACTERISTICS (T_A=25°C)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Reverse Working Voltage	V _R				18.0	V
Reverse Breakdown Voltage	V _{BR}	I _T = 1mA	20.0			V
Reverse Leakage Current	I _R	V _R = 18V			0.5	μA
Peak Pulse Current	I _{pp}	t _p = 8/20μs			150	A
Clamping Voltage	V _C	I _{pp} = 20 A, t _p = 8/20μs			25	V
Clamping Voltage	V _C	I _{pp} = 150A, t _p = 8/20μs			43	V
Junction Capacitance	C _J	V _R = 0V, f = 1MHz		430		pF

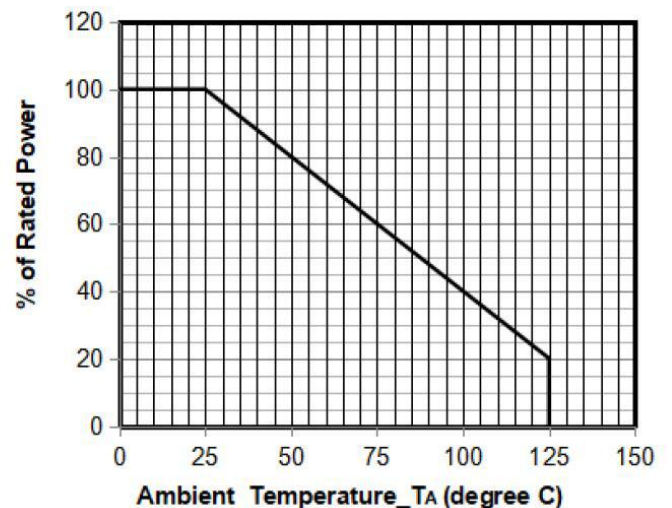
Typical Performance Characteristics (T_A=25°C, unless otherwise noted)



Novction Capacitance vs. Reverse Voltage



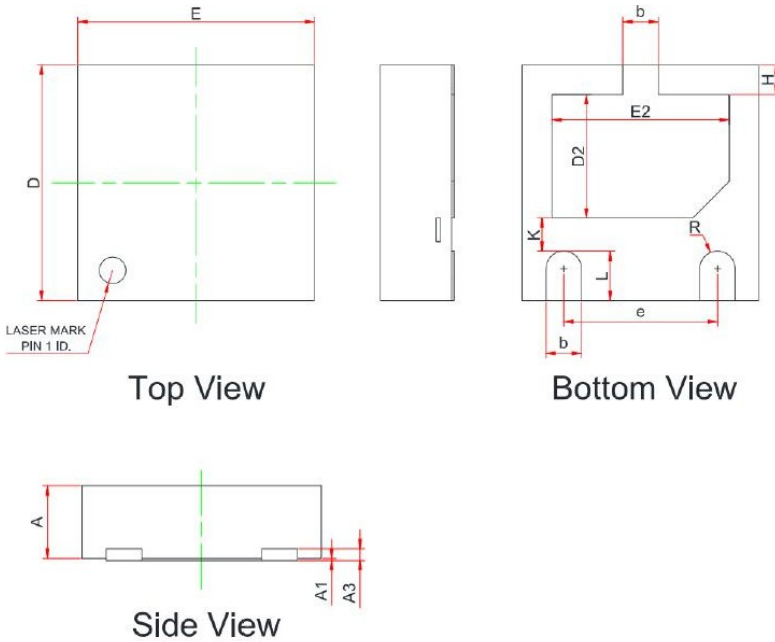
Peak Pulse Power vs. Pulse Time



Clamping Voltage vs. Peak Pulse Current

Power Derating Curve

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

