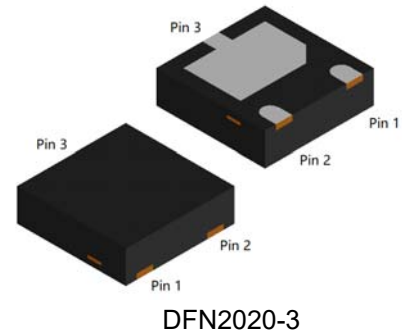


Features

- Stand-off voltage: 24V Max
- Transient protection for each line according to
 - IEC61000-4-2(ESD): $\pm 30\text{kV}$ (contact)
 - IEC61000-4-2(ESD): $\pm 30\text{kV}$ (air)
 - IEC61000-4-5(surge): 200A (8/20 μs)
- Low leakage current
- Low clamping voltage
- Low clamping voltage
- RoHS Compliant
- Compliant to Halogen - free
- Suffix "-Q1" for AEC-Q101



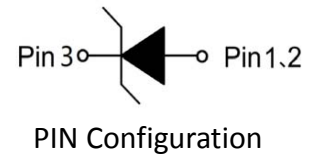
Applications

- Power Management
- Industrial Application
- Power Supply Protection

Mechanical Data

- Package: DFN2020-3
- Case Material: "Green" Molding Compound
- Marking Information:

6161 24XX •



Maximum Ratings

PARAMETER	SYMBOL	LIMITS	UNIT
Peak pulse power ($t_p = 8/20\mu\text{s}$)	P_{pk}	6400	W
Peak pulse current ($t_p = 8/20\mu\text{s}$)	I_{pp}	200	A
ESD according to IEC61000-4-2 air discharge	V_{ESD}	± 30	kV
ESD according to IEC61000-4-2 contact discharge		± 30	
Junction temperature	T_J	-55~125	$^{\circ}\text{C}$
Storage temperature	T_{STG}	-55~150	$^{\circ}\text{C}$

Electrical Characteristics ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

PARAMETER	Symbol	UNIT	Conditions	Min	Typ	Max
Reverse maximum working voltage	V_{RWM}	V				24
Reverse breakdown voltage	V_{BR}	V	$I_{BR} = 1\text{mA}$	25		
Reverse leakage current	I_R	μA	$V_{RWM} = 24\text{V}$			0.5
Clamping voltage ¹⁾	V_{CL}	V	$I_{PP} = 1\text{A}, t_p = 8/20\mu\text{s}$			30
		V	$I_{PP} = 200\text{A}, t_p = 8/20\mu\text{s}$			32
Junction capacitance	C_J	pF	$V_R = 0\text{V}, f = 1\text{MHz}$			800

Notes:

- (1). Non-repetitive current pulse, according to IEC61000-4-5.

Characteristics (Typical)

Fig.1 8/20μs waveform per IEC61000-4-5

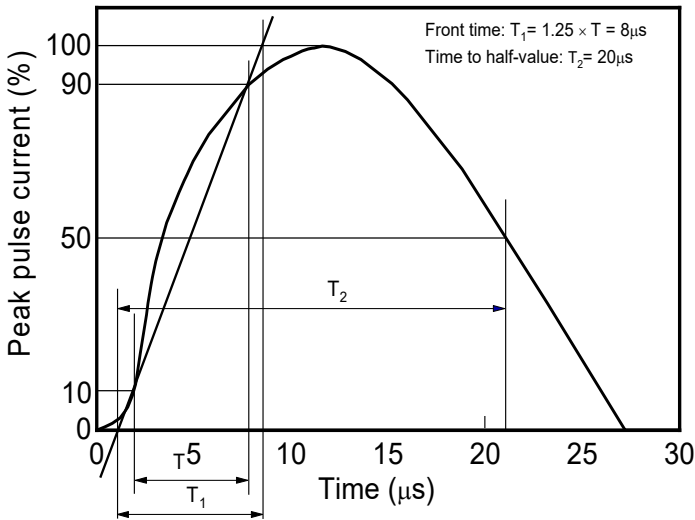


Fig.2 Contact discharge current waveform per IEC61000-4-2

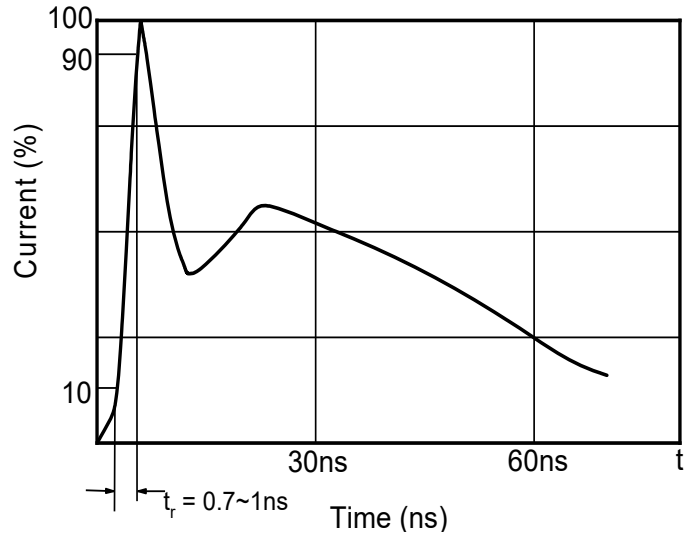


Fig.3 Clamping voltage vs. Peak pulse current

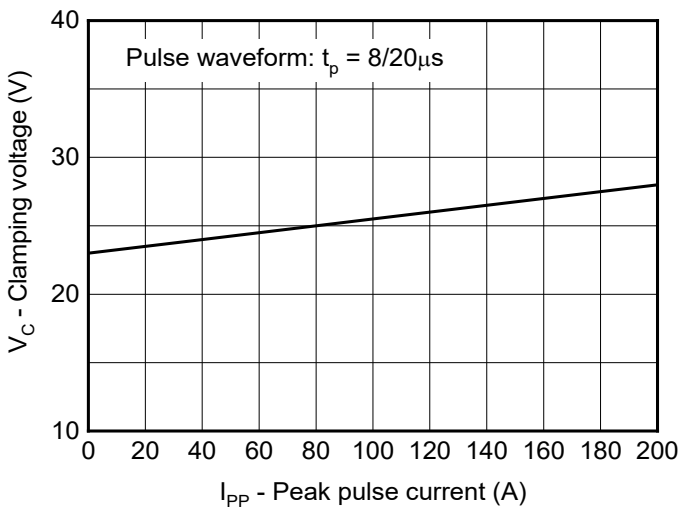


Fig.4 Capacitance vs. Reverse voltage

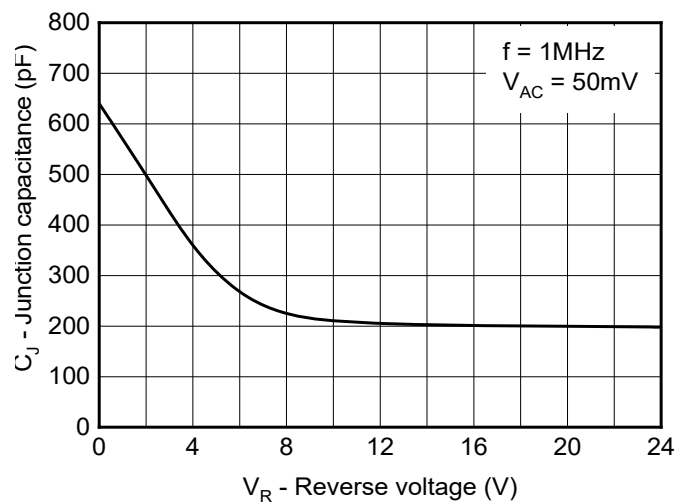


Fig.5 Non-repetitive peak pulse power vs. Pulse time

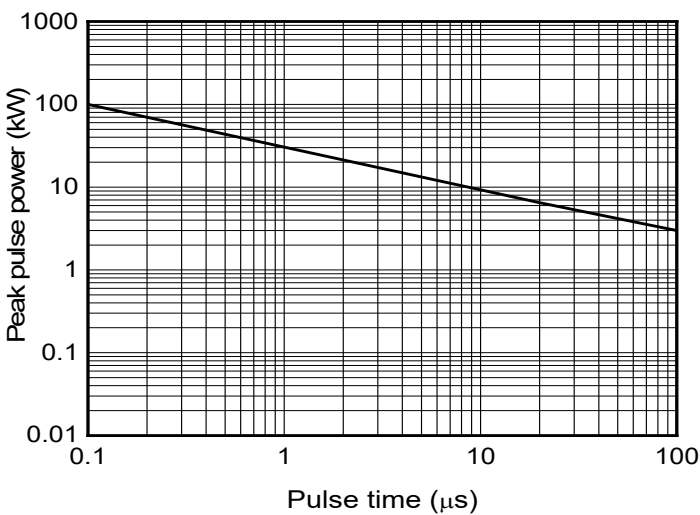
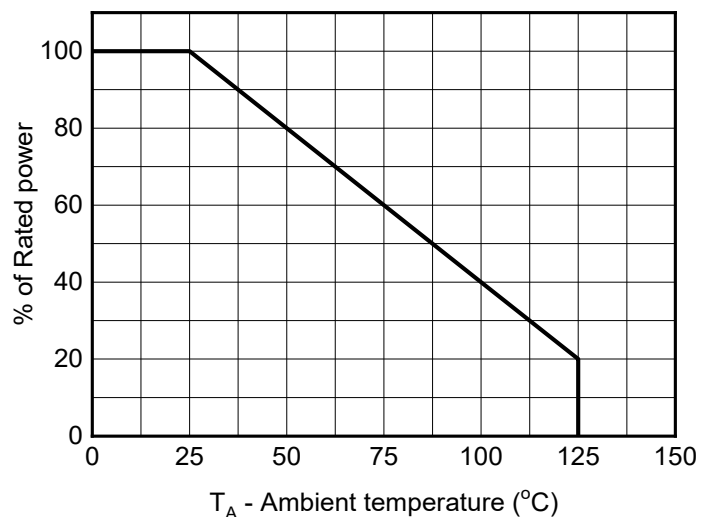
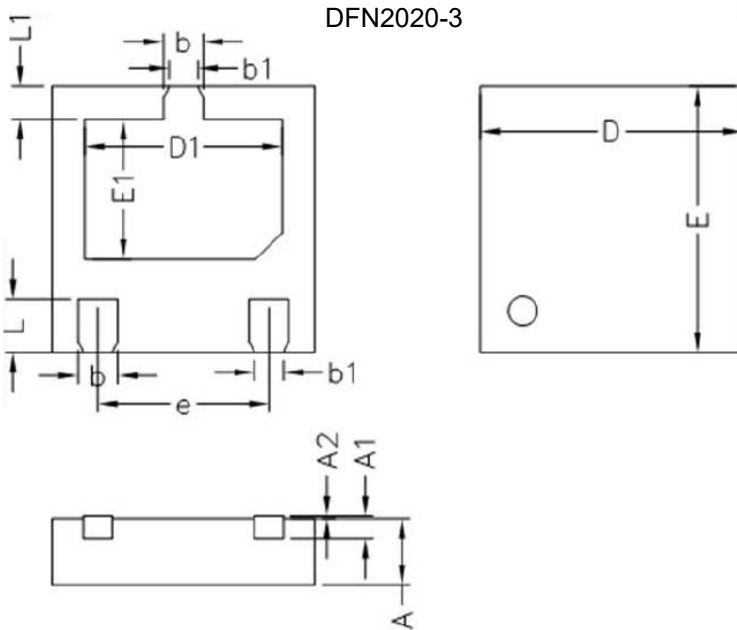


Fig.6 Power derating vs. Ambient temperature

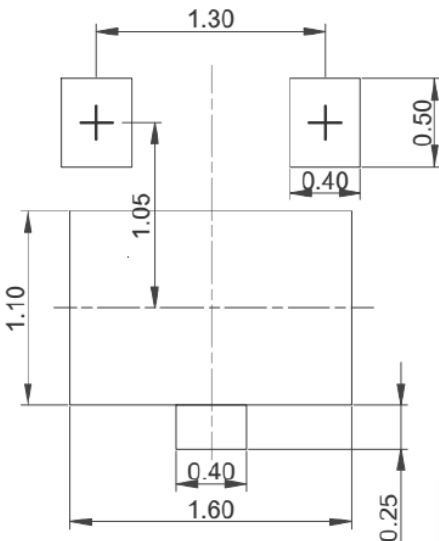


Outline Dimensions



SYM	MILLIMETERS		
	MIN	NOM	MAX
A	0.45	0.50	0.60
A1	0.15REF		
A2	0.00	0.02	0.05
b	0.25	0.30	0.35
b1	0.22REF		
D	1.95	2.00	2.05
D1	1.45	1.50	1.55
E	1.95	2.00	2.05
E1	1.00	1.05	1.10
e	1.30BSC		
L	0.35	0.40	0.45
L1	0.20	0.25	0.30

Recommended PCB Layout



Unit: mm

Notes:

This recommended land pattern is for reference purposes only. Please consult your manufacturing group to ensure your PCB design guidelines are met