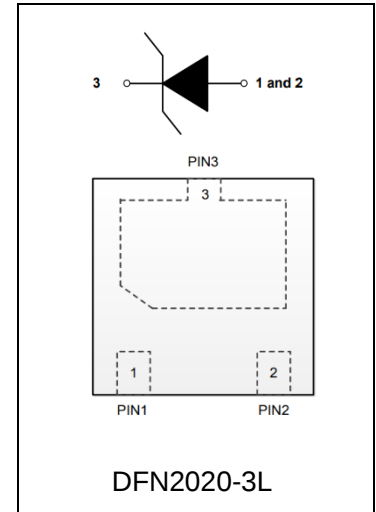


Features

- ◆ Low Clamping Voltage
- ◆ DFN2020-3L package
- ◆ Protect one I/O or power line
- ◆ Stand-off Voltage: 15V
- ◆ Response Time is Typically < 1 ns
- ◆ Transient protection for data lines to
IEC 61000-4-2(ESD) $\pm 30\text{KV}$ (air), $\pm 30\text{KV}$ (contact)
IEC 61000-4-4 (EFT) 80A (5/50ns)
IEC 61000-4-5 (Lightning) 100A (8/20us)



Applications

- ◆ Power supply protection
- ◆ Power management
- ◆ Cell phone handsets and accessories
- ◆ Personal digital assistants (PDA's)
- ◆ Notebooks, desktops, and servers
- ◆ Cellular handsets & accessories
- ◆ Computer and peripherals

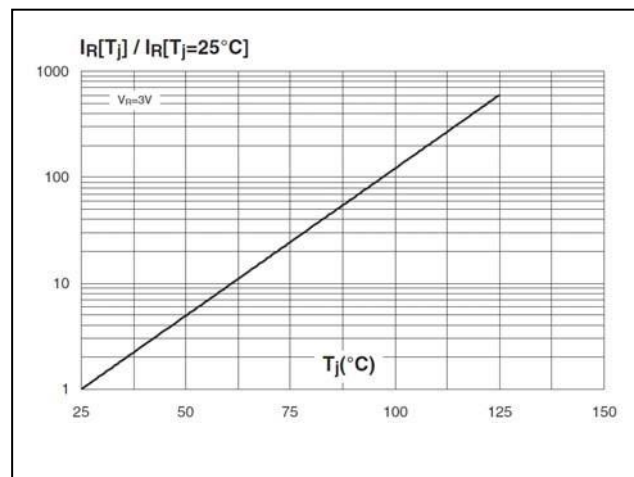
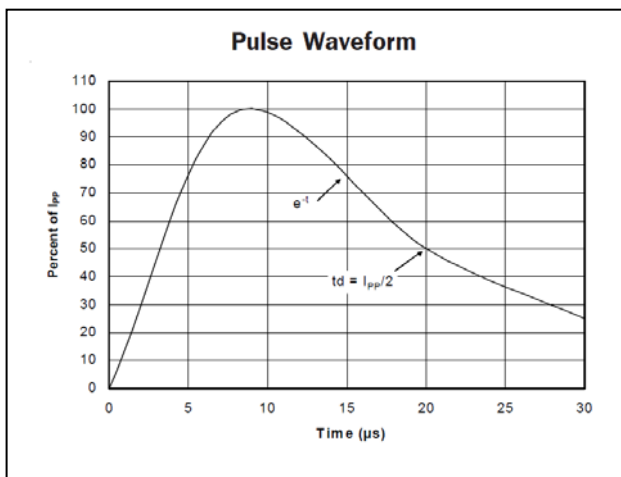
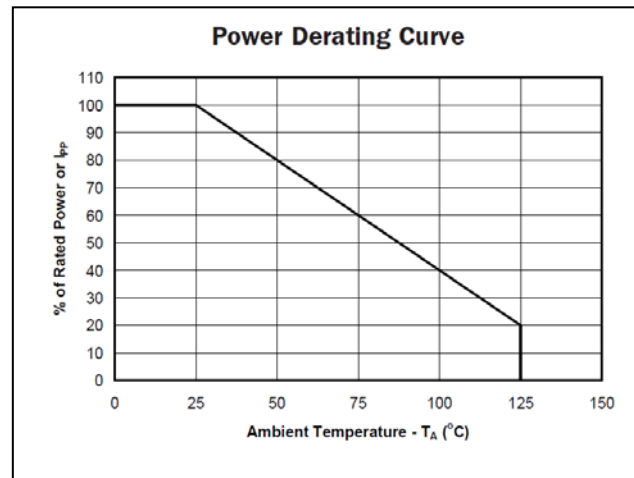
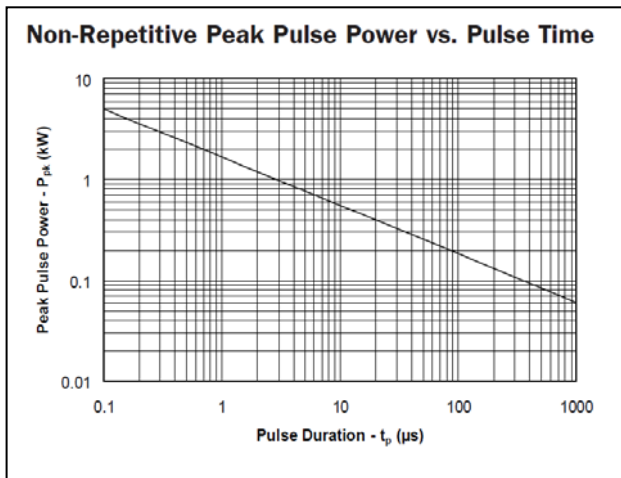
Maximum Rating @ Ta=25°C unless otherwise specified

Symbol	Parameter		Ratings	Units
ESD	IEC 61000-4-2 (HBM-ESD)	Contact	30	KV
		Air	30	
T _L	Lead Soldering Temperature		260(10sec.)	°C
T _J	Operating Temperature		-55 to +125	°C
T _{STG}	Storage Temperature		-55 to +150	°C

Electrical Characteristics@ Ta=25°C unless otherwise

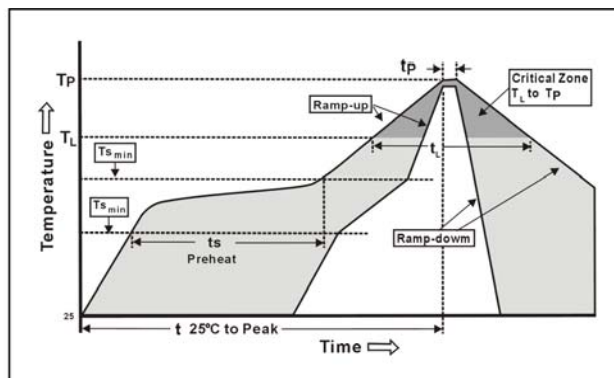
Parameter	Marking	VRWM @IR		VBR@ImA	VC@1A	VC@IPP		CJ
		V	μA	V	V	V	A	pF
			MAX	MIN	MAX	MAX		MAX
ESD3N15V		15	1	16.7	24	34	100	2000

Typical Characteristics@ Ta=25°C unless otherwise specified



Soldering Parameters

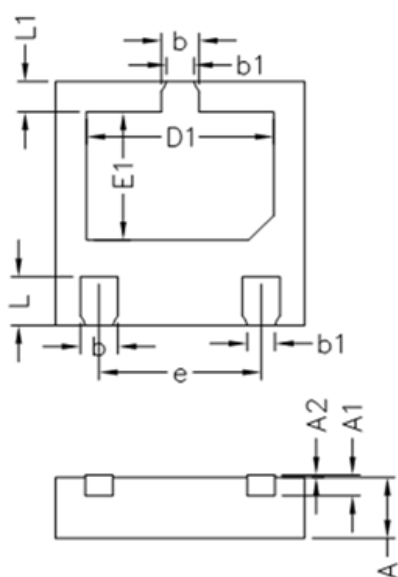
Reflow Condition		Fb – Free assembly
Pre Heat	- Temperature Min ($T_{s(Min)}$)	150°C
	- Temperature Max ($T_{s(Max)}$)	200°C
	- Time (Min to max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus) Temp (T_L) to peak		3°C/second Max
$T_{s(Max)}$ to T_L - Ramp-up Rate		3°C/second Max
Reflow	- Temperature (T_L) (Liquidus)	217°C
	- Temperature (t_L)	60 – 150 seconds
Peak Temperature (T_p)		250 ^{+0/-5} °C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		6°C/second Max
Time 25°C to peak Temperature (T_p)		8 minutes Max.
Do not exceed		260°C



Package Outline

Plastic surface mounted package

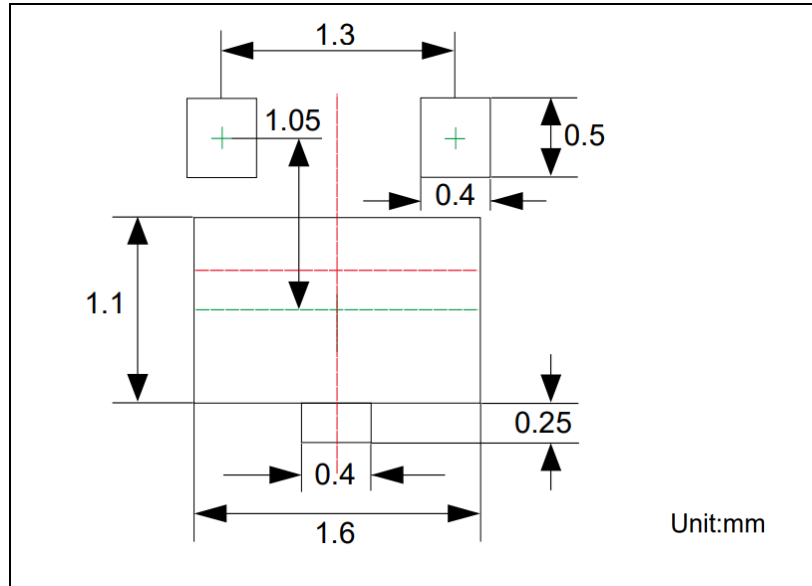
DFN 2020-3L



Units: mm

	Min	Nom	Max
D	1.95	2.00	2.05
E	1.95	2.00	2.05
D1	1.45	1.50	1.55
E1	1.00	1.05	1.10
L1	0.20	0.25	0.30
L	0.35	0.40	0.45
b1	0.22REF		
b	0.25	0.30	0.35
e	1.30BSC		
A1	0.15REF		
A2	0.00	0.02	0.05
A	0.45	0.50	0.55

Soldering Footprint



Package Information

Device	Package	Shipping	Reel Size
ESD3N15V	DFN2020-3L	3K/Reel	7 inch