

Features

- 2-pin lead-less package
- Low junction capacitance (Max value: 0.45pF)
- Peak Pulse Current (8/20μs) MAX: 4A
- IEC61000-4-2 (ESD) ±25kV (air), ±22kV (contact)
- Low clamping voltage
- Low leakage current
- Working voltages: 5V
- RoHS Compliant

Mechanica Characteristics

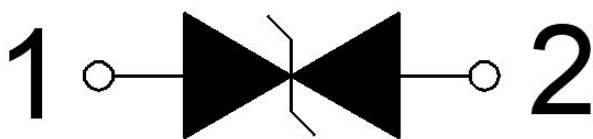
- Package: DFN0603
- Lead Finish: Matte Tin
- Case Material: "Green" Molding Compound.
- UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 3 per J-STD-020
- Tape Reel :15000pcs

Appearance & Symbo



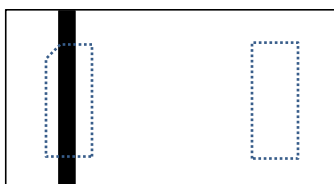
Applications

- High Speed Line :USB1.0/2.0/3.0, VGA, DVI.SDI
- High Definition Multi-Media Interface(HDMI1.3/1.4/2.0)
- Serial and Parallel Ports
- Notebooks, Desktops, Servers
- Peripherals
- Cellular handsets and accessories
- Portable instrumentation



Bi-directional

Marking Information



Absolute Maximum Ratings (T=25°C, RH=45%-75%, unless otherwi

Parameters	Symbol	Value	Unit
Peak Pulse Power (tp=8/20μs waveform)	P _{PP}	100	W
Peak Pulse Current (8/20μs)	I _{PP}	4	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V _{ESD}	±25 ±22	KV
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{stg}	-55 to +150	°C

Electrical Characteristics (T=25°C, RH=45%-75%, unless otherwise noted

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Working Voltage	V _{RWM}				5	V
Reverse Breakdown Voltage	V _{BR}	I _R = 1mA	6		9	V
Reverse Leakage Current	I _R	V _R = 5V			0.2	μA
Clamping voltage	V _C	I _{PP} = 1A, T _P =8/20us			12	V
Clamping voltage	V _C	I _{PP} = 4A, T _P =8/20us			25	V
Junction capacitance	C _J	V _R = 0V, f = 1MHz		0.2	0.45	pF

Typical Characteristics

FIG1: Power rating derating curve

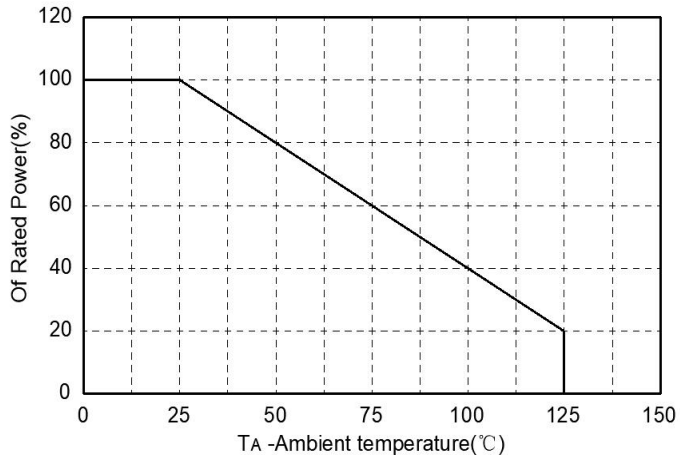


FIG2: pulse Waveform

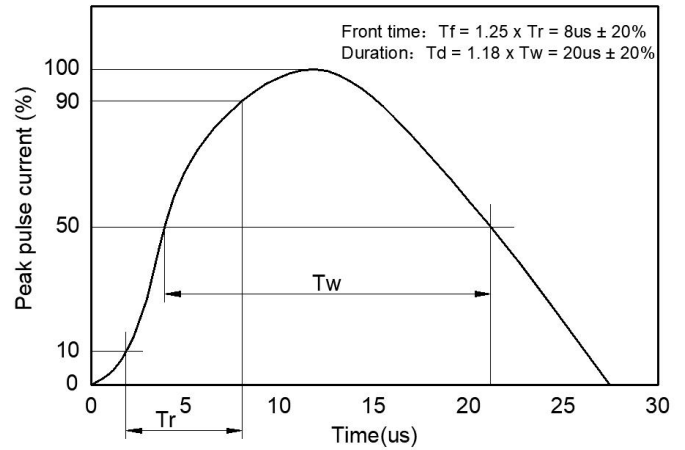


FIG3: Capacitance between terminals characteristics

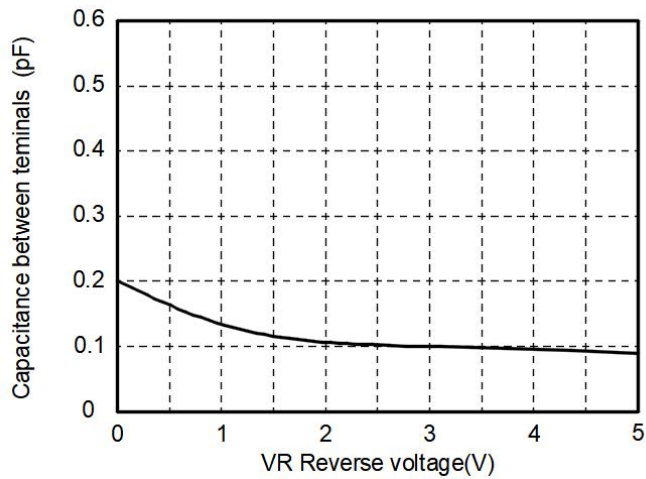
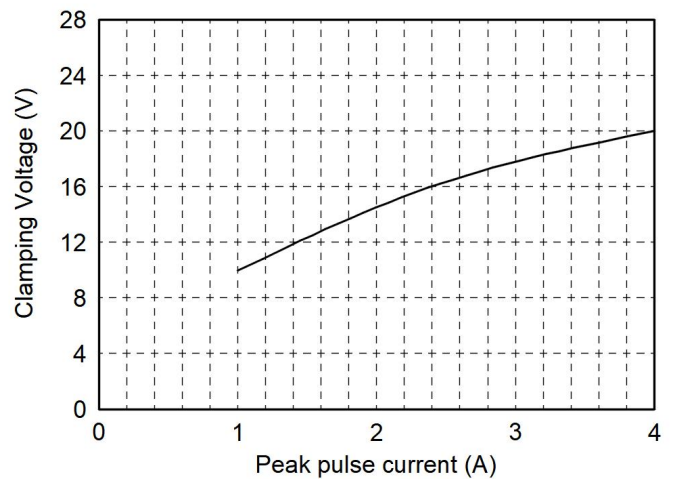
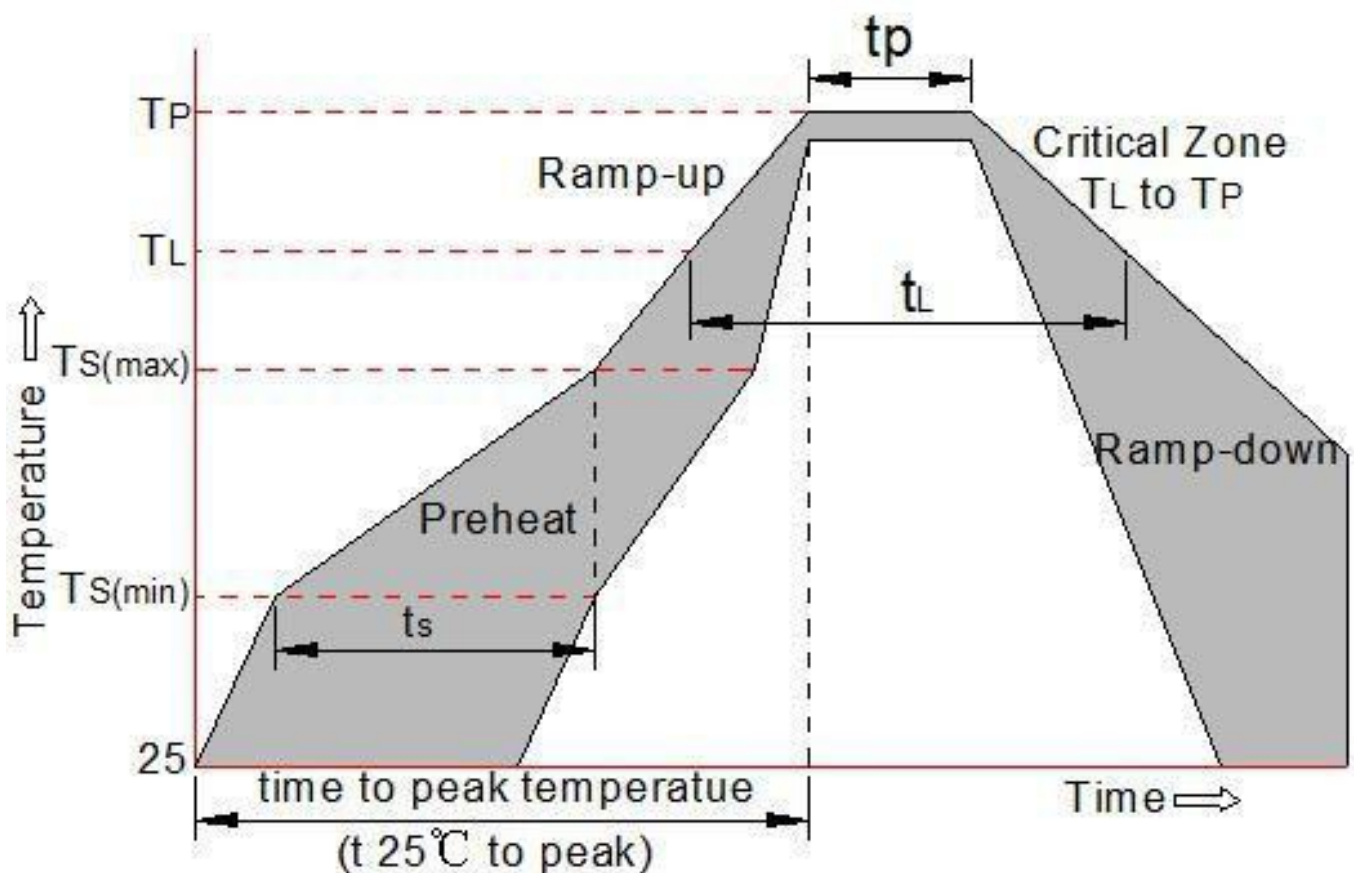


FIG4: Clamping Voltage vs. Peak Pulse Current

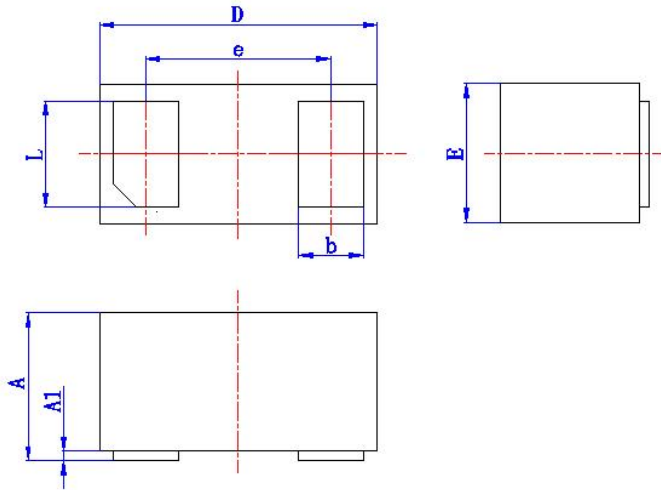


Soldering parameters

Reflow Condition		Pb-Free assembly see as bellow
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 (Liquid us Temp (T_L) to peak)		3°C/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/sec. Max
Reflow	-Temperature(T_L) (Liquid us)	+217°C
	-Temperature(t_L)	60-150 secs.
Peak Temp (T_p)		+260(+0/-5)°C
Time within 5°C of actual Peak Temp (t_p)		30 secs. Max
Ramp-down Rate		6°C/sec. Max
Time 25°C to Peak Temp (T_p)		8 min. Max
Do not exceed		+260°C

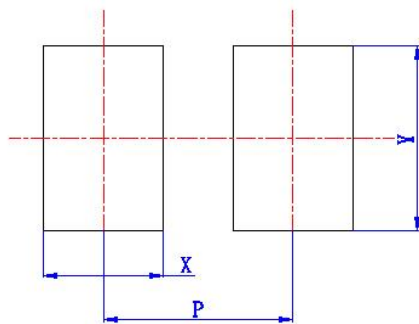


Package mechanical data



Symbol	Dimension in Millimeters	
	min	max
A	0.27	0.37
A1	0	0.05
D	0.55	0.65
E	0.25	0.36
e	(0.4)	
b	0.09	0.2
L	0.17	0.25

Suggested Land Pattern



Symbol	Dimension in Millimeters	
	typ	
X	(0.32)	
Y	(0.40)	
P	(0.47)	