



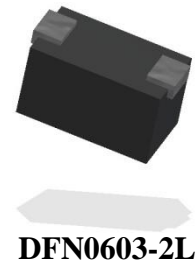
SSCE3V312L1

The SSCE3V312L1 is designed with AF process TVS technology to protect voltage sensitive components from ESD. Excellent clamping capability, low leakage, and fast response time provide best in class protection on designs that are exposed to ESD. Because of its small size, it is suited for use in cellular phones, MP3 players, digital cameras and many other portable applications where board space comes at a premium.

It has been specifically designed to protect sensitive components which are connected to data and transmission lines from overvoltage caused by ESD(electrostatic discharge), and EFT (electrical fast transients).

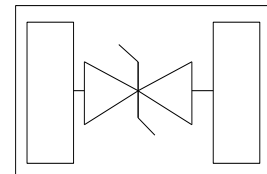
Features

- Peak Power Dissipation –50W (8 x 20 us Waveform)
- Stand-off Voltage: 3.3V
- Low capacitance for high-speed interfaces
- Protects I/O Port
- Low Clamping Voltage
- Low Leakage
- Meets MSL 1 Requirements
- ROHS compliant



Main applications

- High Speed Line : USB1.0/2.0,VGA
- Serial and Parallel Ports
- Notebooks, Desktops, Servers
- Projection TV
- Cellular handsets and accessories
- Portable instrumentation
- Peripherals



Protection solution to meet

- IEC61000-4-2 (ESD) ±30kV (air), ±30kV (contact)

Ordering Information

Device	Marking	Package	Qty per Reel	Reel Size
SSCE3V312L1	T1	DFN0603	15,000pcs	7 Inch



SSCE3V312L1

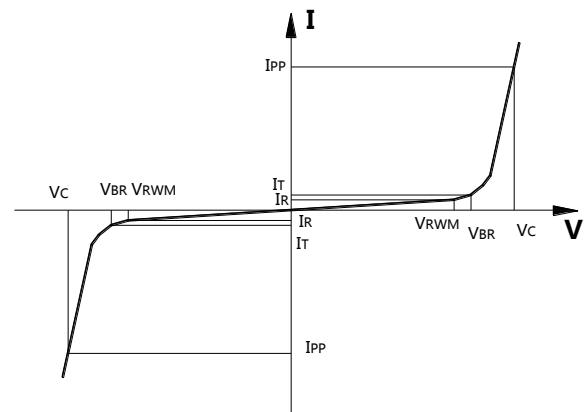
Maximum ratings (Tamb=25°C Unless Otherwise Specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (tp=8/20µs waveform)	PPP	50	Watts
Peak Pulse Current(tp=8/20µs waveform)	IPP	5	A
ESD Rating per IEC61000-4-2:	Contact	30	KV
	Air	30	
Lead Soldering Temperature	TL	260 (10 sec.)	°C
Operating Temperature Range	TJ	-55 ~ 150	°C
Storage Temperature Range	TSTG	-55 ~ 150	°C
Lead Solder Temperature – Maximum (10 Second Duration)	TL	260	°C

Electrical characteristics (Tamb=25°C Unless Otherwise Specified)

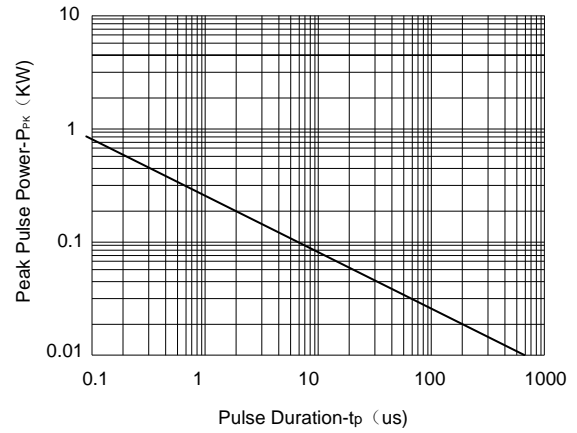
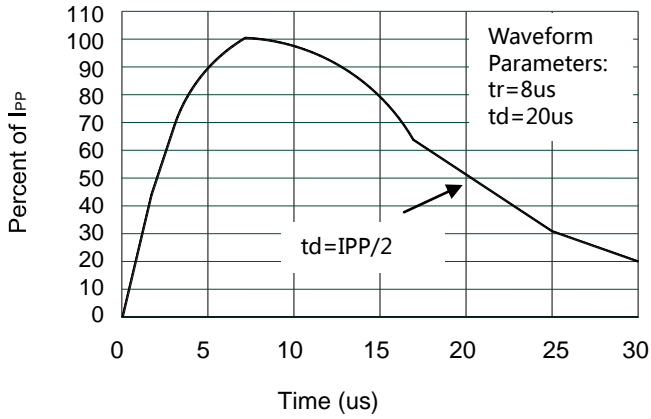
Symbol	Parameter	Conditions	Min.	Typ.	Max.	Units
VRWM	Reverse Working Voltage				3.3	V
VBR	Breakdown Voltage	IT = 1mA,	3.8			V
IR	Reverse Leakage Current	VRWM = 3.3V,		0.01	0.5	uA
VC	Clamping Voltage	IPP = 1A, tp =8/20µs,		6		V
		IPP = 5A, tp =8/20µs,		8	10	V
CJ	Junction Capacitance	VR = 0V, f = 1MHz,		13	20	pF

Symbol	Parameter
VRWM	Working Peak Reverse Voltage
VBR	Breakdown Voltage @ IT
VC	Clamping Voltage @ IPP
IT	Test Current
IRM	Leakage current at VRWM
IPP	Peak pulse current
CO	Off-state Capacitance
CJ	Junction Capacitance



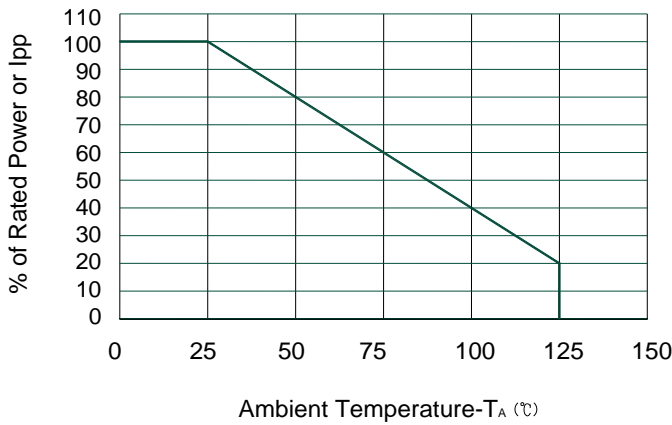


Typical electrical characterist applications



Pulse Waveform

Non-Repetitive Peak Pulse Power vs. Pulse Time



Power Derating Curve



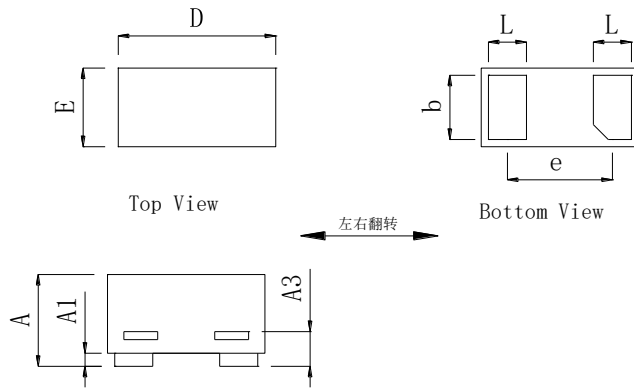
Package Information

DFN0603-2L

Mechanical Data

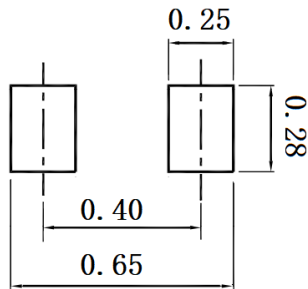
Case: DFN0603-2L

Case Material: Molded Plastic. UL Flammability

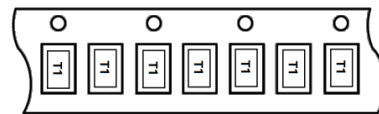


DIM	Millimeters	
	Min	Max
A	0.230	0.330
A1	0.000	0.050
A3	0.102REF	
D	0.550	0.650
E	0.250	0.350
b	0.210	0.275
L	0.120	0.175
e	0.40BSC	

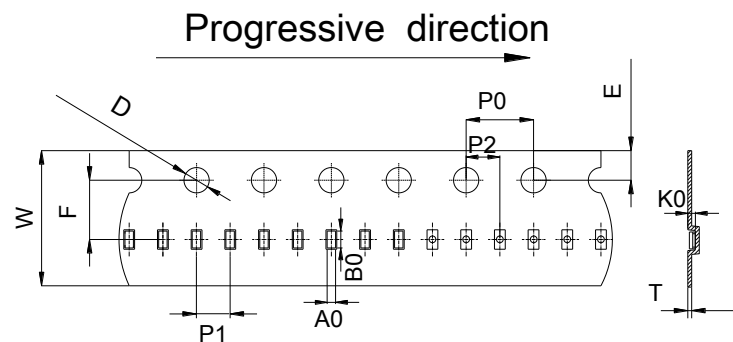
Recommended Pad outline



Device Orientation in Tape



DFN0603 Reel Dim



PACKAGE	W	E	F	P0	D	P2	P1	T	A0	B0	K0
DFN0603	8mm	1.75mm	3.5mm	4mm	1.5mm	2mm	2mm	0.23mm	0.34mm	0.67mm	0.4mm
	±0.1	±0.1	±0.05	±0.1	±0.1	±0.05	±0.1	±0.02	±0.05	±0.05	±0.05



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