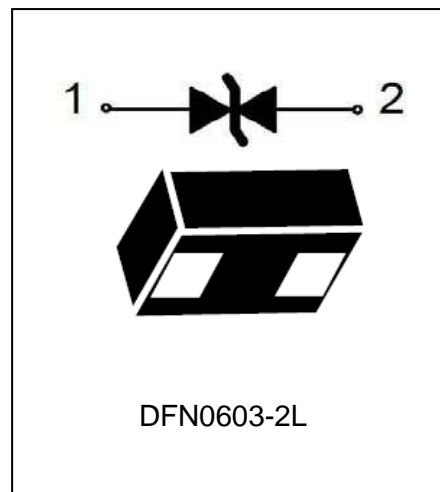


Single Line TVS Diode for ESD

TVS Diode Array

Features:

- ◆ low Capacitance 10pF
- ◆ Low Clamping Voltage
- ◆ Small Body Outline Dimensions: 0.61 mm x0.31 mm
- ◆ Low Body Height: 0.28mm
- ◆ Stand-off Voltage: 24V
- ◆ Low Leakage
- ◆ Response Time is Typically < 1 ns
- ◆ IEC61000-4-2 Level 4 ESD Protection for data lines
- ◆ These are Pb-Free Devices



Applications:

- ◆ 10/100/1000 Mb/s Ethernet
- ◆ FireWire
- ◆ Display ports
- ◆ MDDI ports
- ◆ Digital Visual Interface (DVI)
- ◆ Cellular handsets & accessories
- ◆ Computer and peripherals

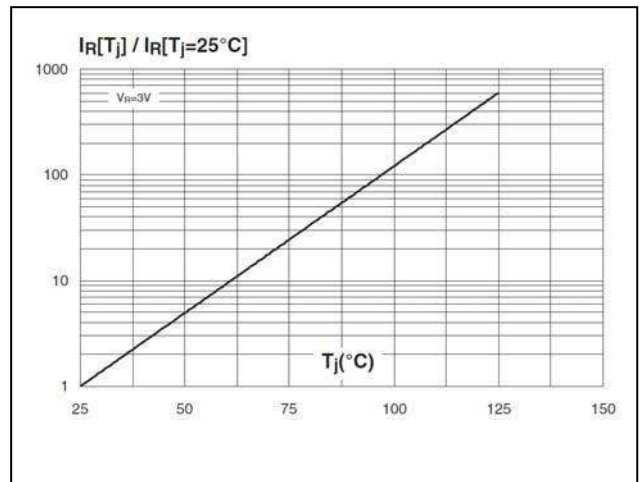
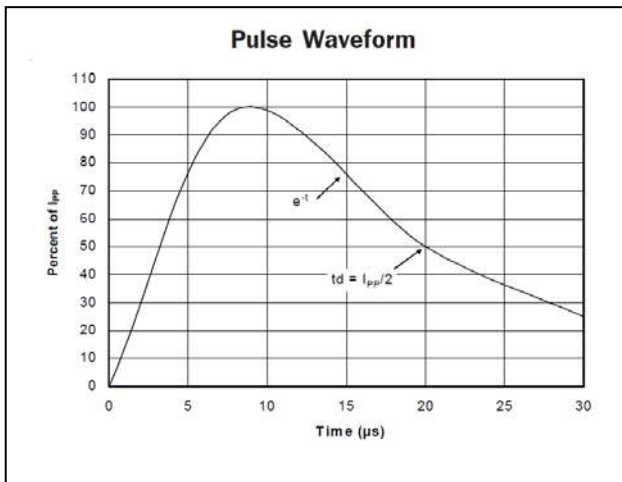
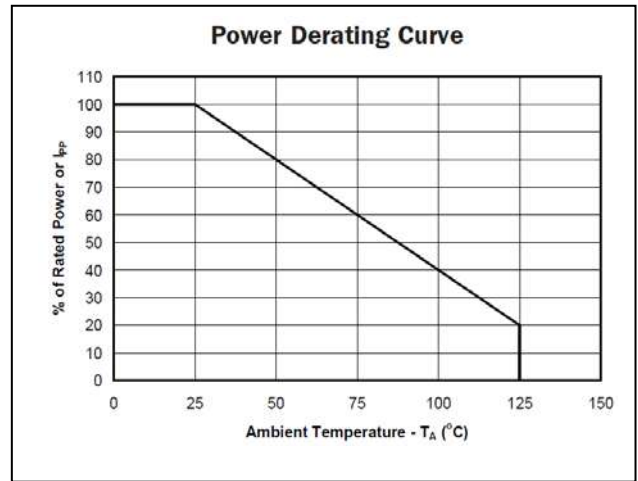
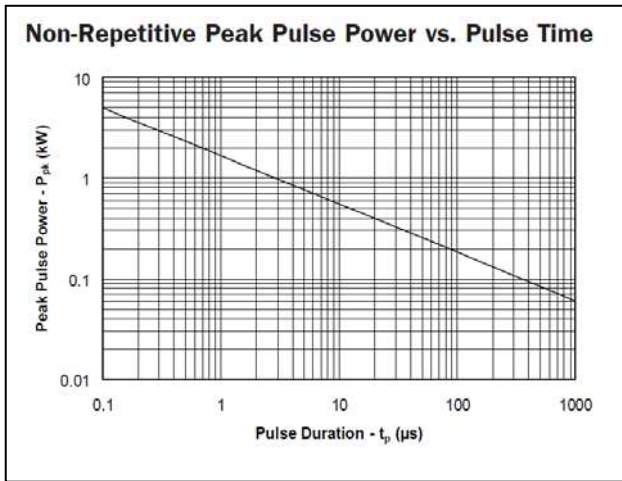
Maximum Rating @ Ta=25°C unless otherwise specified

Symbol	Parameter	Ratings	Units
ESD	IEC 61000-4-2 (HBM-ESD)	Contact	8
		Air	15
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 @ $T_a=25^\circ\text{C}$ unless otherwise

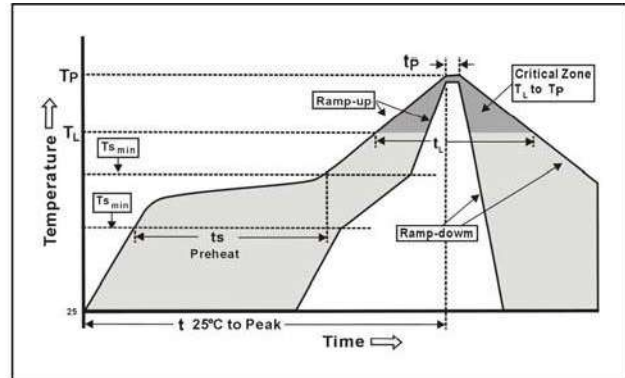
Parameter	Marking	VRWM @IR		VBR@ImA	VC@1A	VC@IPP		CJ
		V	μA	V	V	V	A	pF
			MAX	MIN	MAX	MAX		MAX
KW2411L		24	1	26.2	44.8	65.8	3	10

Typical Characteristics @ $T_a=25^\circ\text{C}$ unless otherwise specified



Soldering Parameters

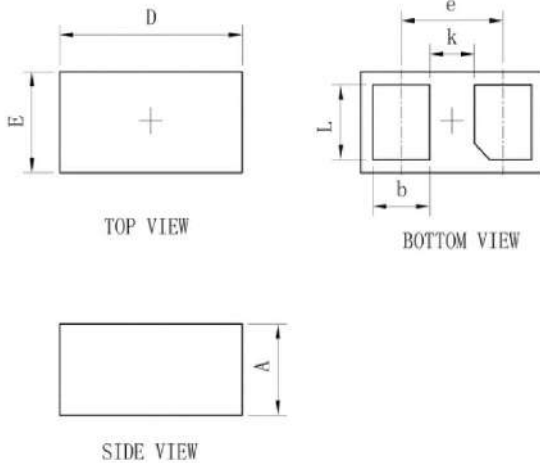
Reflow Condition		Fb – Free assembly
Pre Heat	- Temperature Min ($T_{s(Min)}$)	150°C
	- Temperature Max ($T_{s(Max)}$)	200°C
	- Time (Min to max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus Temp (T_L) to peak)		3°C/second Max
$T_{s(Max)}$ to T_L - Ramp-up Rate		3°C/second Max
Reflow	- Temperature (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

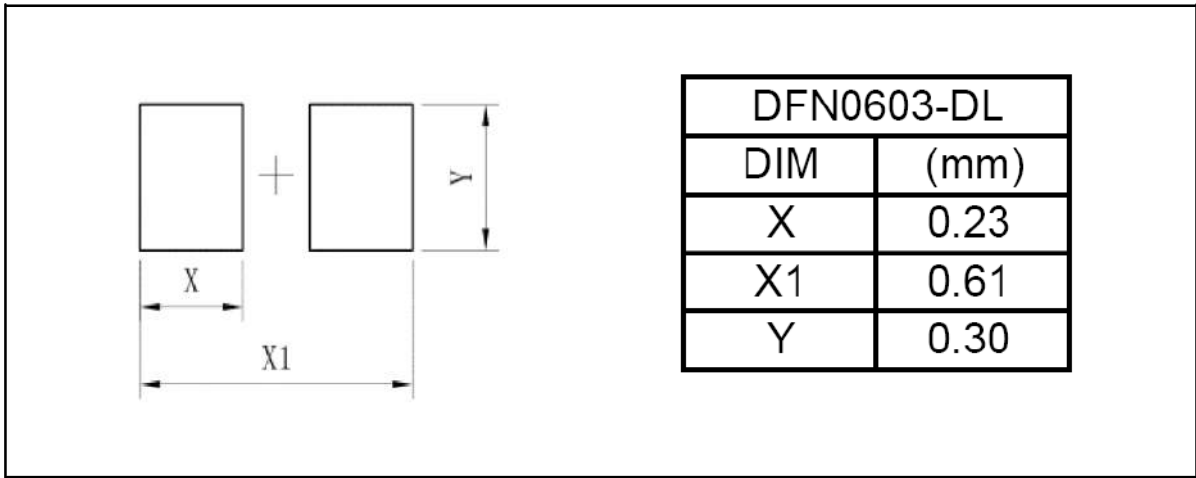
Plastic surface mounted package

DFN 0603-2L



DFN0603-DL			
Dim	Min	Typ.	Max
D	0.58	0.61	0.64
E	0.28	0.31	0.34
e	-	0.34	-
L	0.20	0.23	0.26
b	0.16	0.19	0.22
A	0.25	0.28	0.31
k	0.12	0.15	0.18
All Dimensions in mm			

Soldering Footprint



Package And Marking Information

Device	Package	Shipping	Reel Size
KW2411L	DFN0603	15K/Reel	7 inch