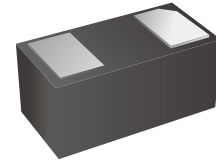


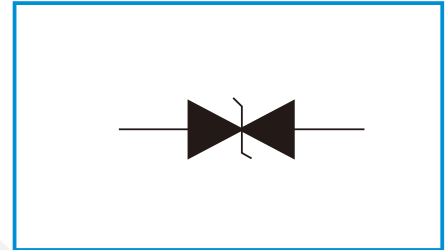
Transient Voltage Suppressors for ESD Protection



Features

- Small Body Outline Dimensions:
0.61 mm x 0.31 mm
- Low Body Height: 0.28 mm
- Low Leakage
- Response Time is Typically < 1 ns
- ESD Rating of Class 3 (> 20 kV) per Human Body Model
- IEC61000-4-2 Level 4 ESD Protection
- These are Pb-Free Devices
- We declare that the material of product compliance with RoHS requirements.
- Marking: Q

Functional Diagram



Applications

- Cellular phones audio
- Mp3 players
- Digital cameras
- Portable applications
- Mobile telephone

Maximum Ratings (T_{amb}=25°C unless otherwise noted)

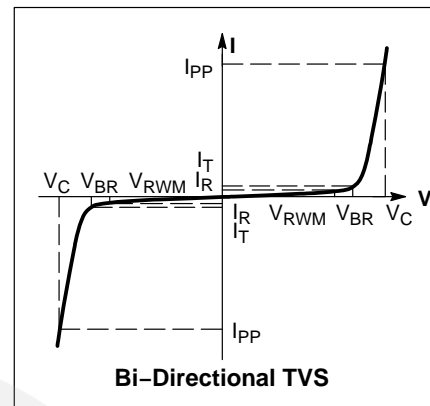
Rating	Symbol	Value	Unit
IEC 61000-4-2 (ESD) Air discharge		±25	kV
Contact discharge		±20	kV
Total Power Dissipation on FR-5 Board (Note 1) @ T _A =25°C	PD	200	mW
Junction and Storage Temperature Range	T _J ,T _{STG}	-55 to 150	°C
Lead Solder Temperature – Maximum (10 Second Duration)	TL	260	°C

Stresses exceeding Maximum Ratings may damage the device. Maximum Rating are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

1. FR-5 = 1.0*0.75*0.62 in.

Electrical Characteristics

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
P_{pk}	Peak Power Dissipation
C	Capacitance @ $V_R = 0$ and $f = 1.0$ MHz



Electrical Characteristics (TA=25°C unless otherwise specified)

Device	V_{RWM} (V)	I_R (μ A) @ V_{RWM}	V_{BR} (V) @ I_T (Note 1)		I_T (mA)	I_{PP} (A)	V_C (V) @ Max I_{PP}	P_{PK} (W) (8*20 μ s)	C (pF)
	Max	Max	Min	Max		Max	Max	Max	Max
LTE06N05C01LR	5.0	0.5	6	8.8	1.0	4	20	80	0.3

Other voltage available upon request.

1. V_{BR} is measured with a pulse test current I_T at an ambient temperature of 25

Typical Characteristics

Fig1. Pulse Waveform

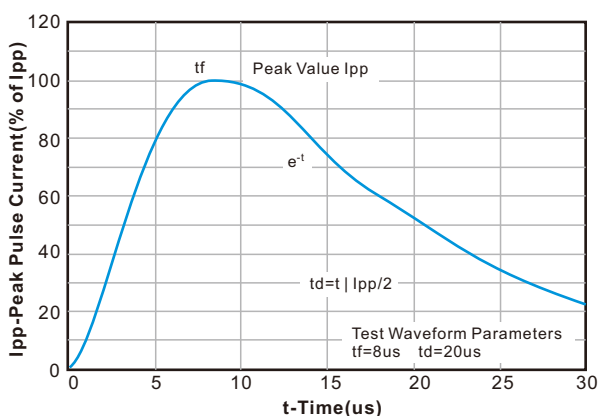
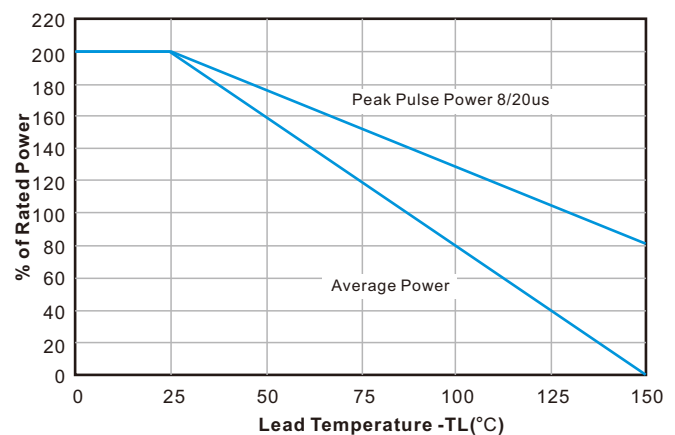
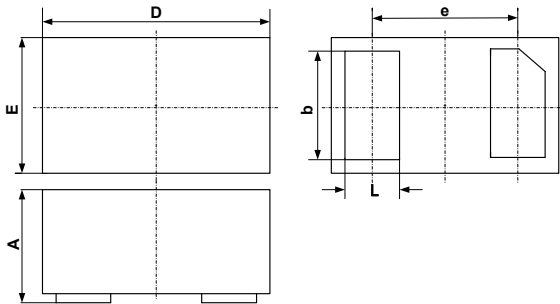


Fig2. Power Derating Curve

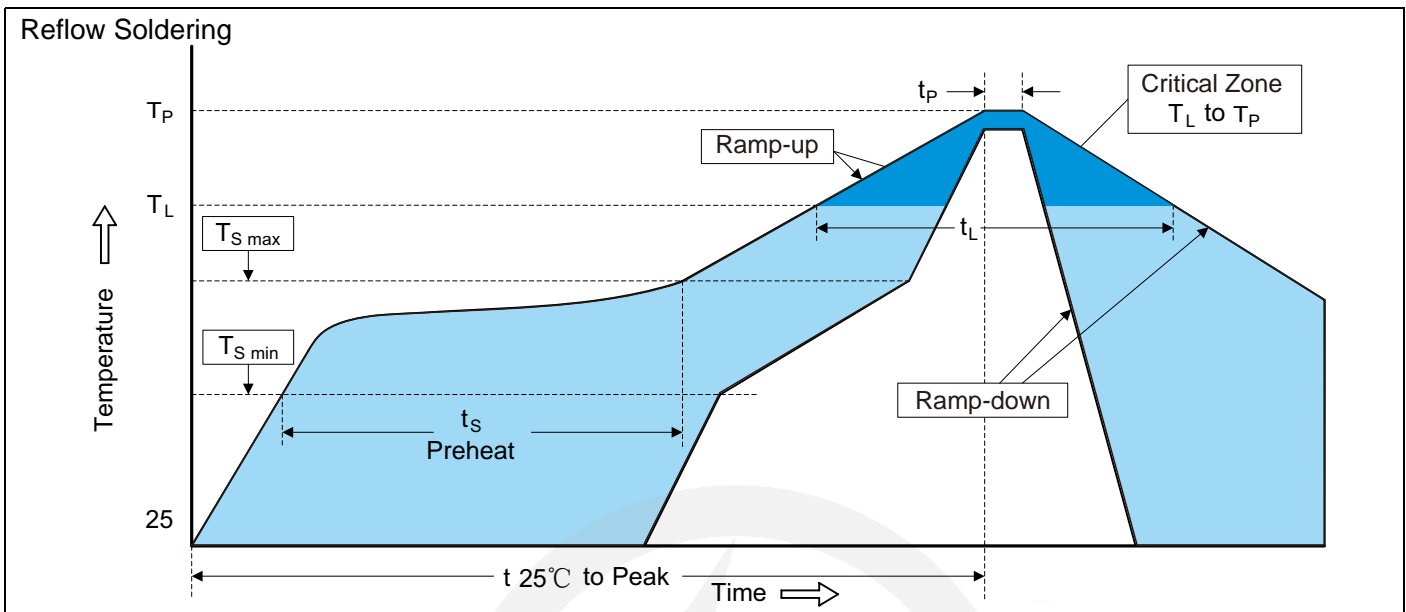


DFN0603 Package Outline



SYM	DIMENSIONS	
	MILLIMETERS	
	MIN	MAX
A	0.230	0.370
b	0.200	0.275
D	0.550	0.670
e	0.360 BSC	
E	0.250	0.370
L	0.120	0.220



Recommended Soldering Conditions

Recommended Conditions

Profile Feature	Pb-Free Assembly
Average ramp-up rate (T_L to T_P)	3°C/second max.
Preheat -Temperature Min ($T_{S\ min}$) -Temperature Max ($T_{S\ max}$) -Time (min to max) (t_s)	150°C 200°C 60-180 seconds
$T_{S\ max}$ to T_L -Ramp-up Rate	3°C/second max.
Time maintained above: -Temperature (T_L) -Time (t_L)	217°C 60-150 seconds
Peak Temperature (T_P)	260°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	8 minutes max.

7" Reel


D2	$\Phi 178.0 \pm 2.0$
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D3	$\Phi 50.0 \text{ Min.}$
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D4	$\Phi 13.0 \pm 0.5$
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W1	16.0 ± 2.0
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Quantity: 15000PCS