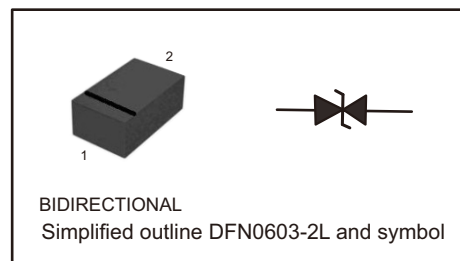




Transient Voltage Suppressors for ESD Protection

FEATURES

- Stand-off voltage: $\pm 5V$ Max.
- Transient protection for each line according to
IEC61000-4-2(ESD): $\pm 30kV$ (contact)
IEC61000-4-4 (EFT): 40A (5/50ns)
- Ultra-low capacitance: $C_J = 35pF$ typ.
- Low leakage current

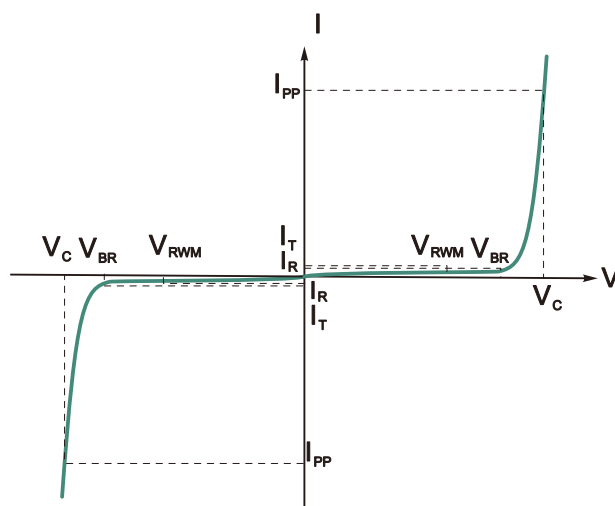


Applications

- Computers and peripherals;
- Audio and video equipment;
- Communication systems;
- Portable electronics.

Electronics Parameter

| Parameter | Symbol |
|-------------------------------------|-----------|
| Maximum Reverse Peak Pulse Current | I_{PP} |
| Clamping Voltage @ I_{PP} | V_C |
| Peak Reverse Working Voltage | V_{RWM} |
| Reverse Leakage Current @ V_{RWM} | I_R |
| Breakdown Voltage @ I_T | V_{BR} |
| Test Current | I_T |





MAXIMUM RATINGS (Ta =25°C unless otherwise noted)

| Parameter | Symbol | Value | Unit |
|---------------------------------|--------|-----------|------|
| Peak Pulse Power (8/20 μS) | Ppk | 100 | W |
| Peak Pulse Current | Ipp | 8 | A |
| ESD per IEC 61000-4-2 (Air) | VESD | ±30 | KV |
| ESD per IEC 61000-4-2 (Contact) | | ±30 | |
| Operating Temperature Range | TJ | -55~ +150 | °C |
| Storage Temperature Range | Tstg | -55~ +150 | °C |

ELECTRICAL CHARACTERISTICS (TA = 25°C unless otherwise noted)

| Parameter | Symbol | Test conditions | Min | Typ | Max | Unit |
|---------------------------|--------|---------------------------------|-----|------|------|------|
| Reverse stand-off voltage | VRWM | | | | 5 | V |
| Breakdown Voltage | VBR | IT=1mA | 6 | | 10 | V |
| Reverse Leakage Current | IR | V=VRWM , Ta=25°C | | | 0.1 | uA |
| Clamping Voltage | VC | I _{PP} =1A , tp=8/20us | | | 12 | V |
| | | I _{PP} =8A , tp=8/20us | | | 15.5 | |
| Junction Capacitance | Cj | VR=0V , f=1HMz | 25 | 35 | 45 | pF |
| | | VR=2.5V , f=1HMz | | 26.5 | 35 | |
| | | VR=5.0V , f=1HMz | | 23.7 | 31 | |

Fig.1 Pulse Waveform

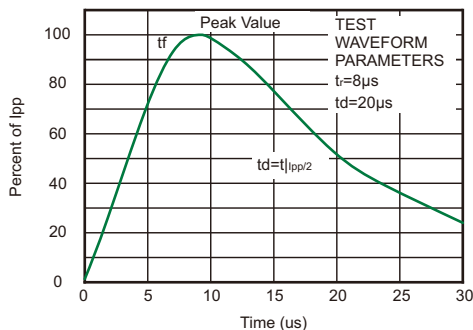
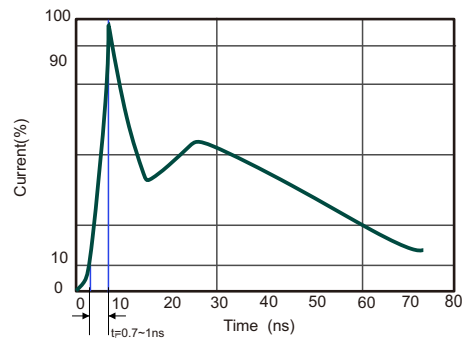
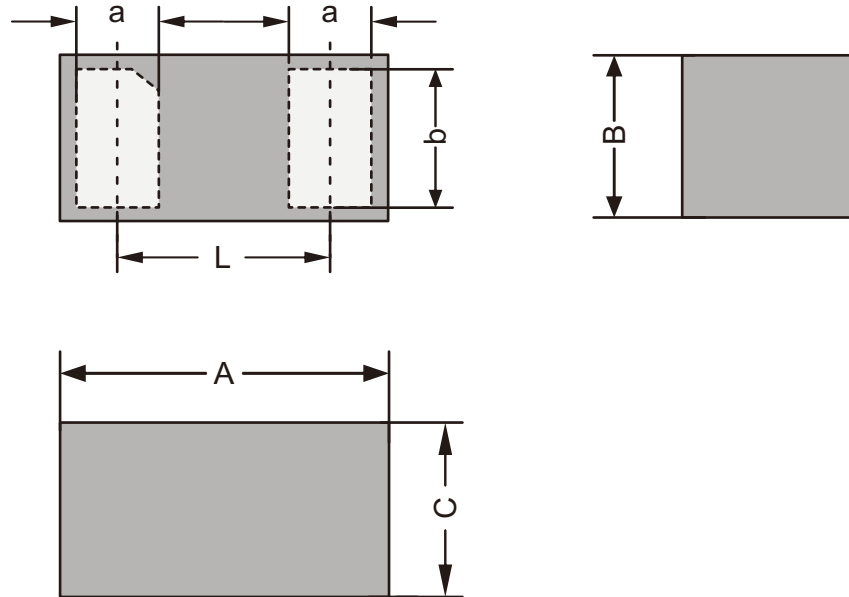


Fig.2 Contact discharge current waveform per IEC61000-4-2





DFN0603-2L Package Outline Dimensions



DFN0603-2L mechanical data

| UNIT | | A | B | C | a | b | L |
|------|-----|-------|-------|-------|------|-------|-------|
| mm | max | 0.65 | 0.35 | 0.34 | 0.19 | 0.26 | 0.36 |
| | min | 0.58 | 0.28 | 0.28 | 0.13 | 0.20 | |
| mil | max | 25.59 | 13.78 | 13.39 | 7.48 | 10.24 | 14.17 |
| | min | 22.83 | 11.02 | 11.02 | 5.12 | 7.87 | |

Marking

| Type number | Marking code |
|-------------|--------------|
| ESDB5V0DSP8 | H |



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