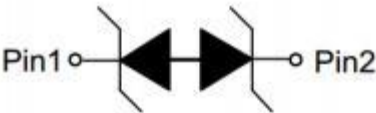


APPEARANCE



DFN1006-2L (Bottom View)

PIN CONFIGURATION



Pin configuration (Top view)

Descriptions

The APED5.0L2.0-10 is a Bi-directional transient voltage suppressor (TVS) to protect sensitive electronic components from electrostatic discharge (ESD). It is particularly well-suited for cellular phones, PMP , MID, PDA, digital cameras and other electronic quipment. The APED5.0L2.0-10 is safely dissipating ESD strikes to meet the ESD immunity testing of IEC61000-4-2 ( $\pm 20\text{KV}$ ).

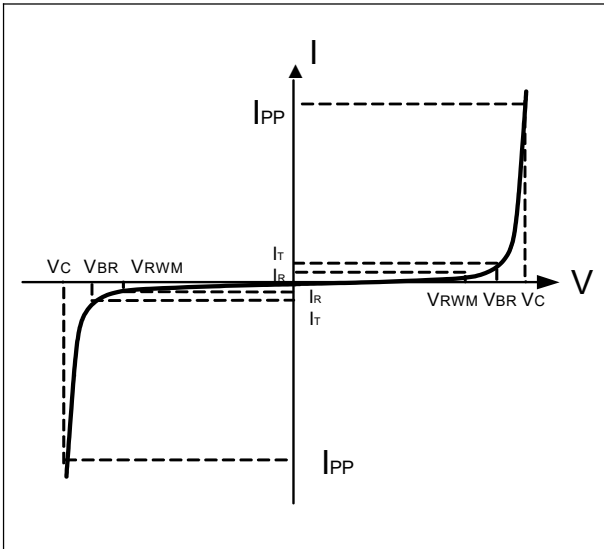
The APED5.0L2.0-10 is available in DFN1006-2L package. Standard products are Pb-free and Halogen-free.

Order information

| Device         | Package    | Shipping        |
|----------------|------------|-----------------|
| APED5.0L2.0-10 | DFN1006-2L | 10000/Tape&Reel |

Electrical Parameters (T=25°C )

| Symbol | Parameter                      |
|--------|--------------------------------|
| VRWM   | Reverse Stand-off Voltage      |
| IR     | Reverse Leakage Current @ VRWM |
| VBR    | Reverse Breakdown Voltage @ IT |
| IT     | Test Current                   |
| IPP    | Reverse Peak Pulse Current     |
| VC     | Clamping Voltage @ IPP         |



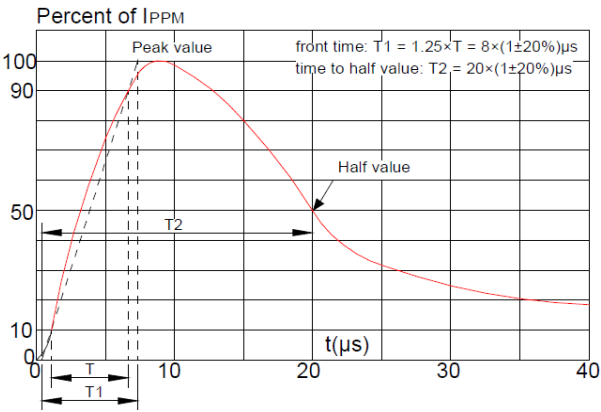
### Absolute maximum ratings

| Parameter                                       | Symbol           | Rating  | Unit |
|-------------------------------------------------|------------------|---------|------|
| Peak pulse power ( $t_p = 8/20\mu s$ )          | Ppk              | 45      | W    |
| Peak pulse current ( $t_p = 8/20\mu s$ )        | I <sub>PP</sub>  | 3.0     | A    |
| ESD according to IEC61000-4-2 air discharge     | V <sub>ESD</sub> | ±20     | kV   |
| ESD according to IEC61000-4-2 contact discharge |                  | ±20     | kV   |
| Junction temperature                            | T <sub>J</sub>   | 150     | °C   |
| Operating temperature                           | T <sub>OP</sub>  | -55~150 | °C   |
| Storage temperature                             | T <sub>STG</sub> | -55~150 | °C   |

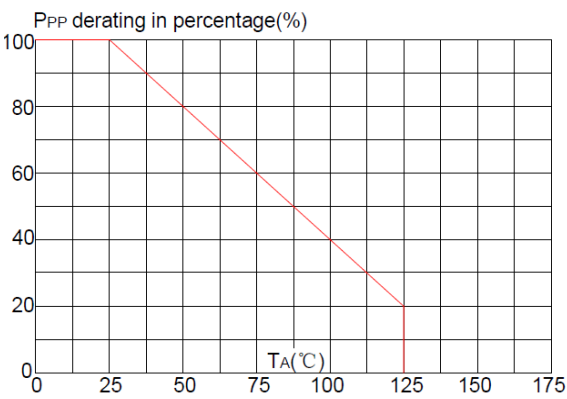
### Electronics characteristics (Ta=25°C)

| Parameter                 | Symbol         | Condition                                     | Min | Typ | Max | Units |
|---------------------------|----------------|-----------------------------------------------|-----|-----|-----|-------|
| Reverse Stand-off Voltage | VRWM           |                                               |     |     | 5.0 | V     |
| Reverse Breakdown Voltage | VBR            | I <sub>t</sub> =1mA                           | 6.0 | 6.5 | 9.0 | V     |
| Reverse Leakage Current   | I <sub>R</sub> | VRWM=±5.0V                                    |     |     | 0.2 | uA    |
| Clamping Voltage          | V <sub>C</sub> | I <sub>pp</sub> =2.0A, t <sub>p</sub> =8/20us |     |     | 13  | V     |
| Junction Capacitance      | C <sub>j</sub> | V <sub>R</sub> =0V, f=1MHz                    |     | 5.3 |     | pF    |

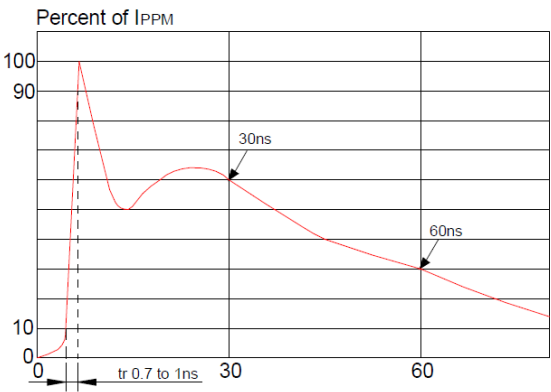
Typical characteristics (Ta=25°C)



Pulse Waveform (8/20us)

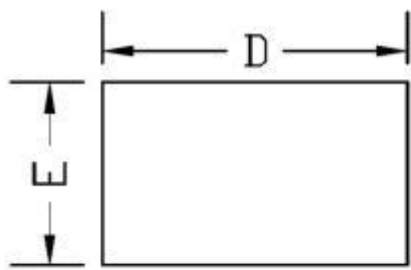


Pulse Derating Curve

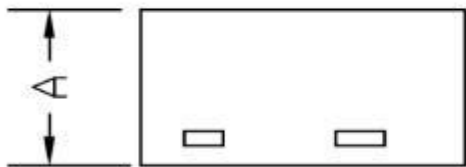


ESD Clamping(8kV Contact Discharge )

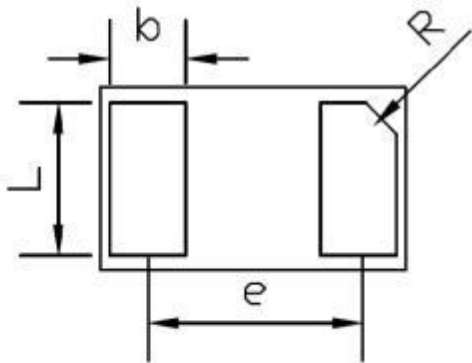
PACKAGE OUTLINE DIMENSIONS(DFN1006-2L)



TOP VIEW



SIDE VIEW



BOTTOM VIEW

| COMMON DIMENSION (MM) |         |      |      |
|-----------------------|---------|------|------|
| PKG                   | DFN1006 |      |      |
| REF.                  | MIN.    | NOM. | MAX  |
| A                     | 0.45    | 0.50 | 0.55 |
| D                     | 0.95    | 1.00 | 1.05 |
| E                     | 0.55    | 0.60 | 0.65 |
| b                     | 0.20    | 0.25 | 0.30 |
| L                     | 0.45    | 0.50 | 0.55 |
| e                     | 0.675   |      |      |
| R                     | 0.07    | 0.10 | 0.13 |

Note:  
This recommended land pattern is for reference purpose only.