

**APPEARANCE**



DFN0603-2L (Bottom View)

**PIN CONFIGURATION**



Pin configuration (Top view)

**Descriptions**

The APED5.0M9.0-06 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 APED5.0M9.0-06 is safely dissipating ESD strikes to meet the ESD immunity testing of IEC61000-4-2 ( $\pm 30KV$ ).

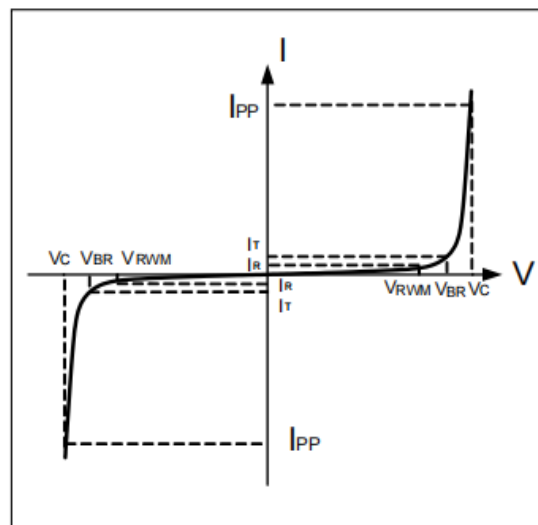
The APED5.0M9.0-06 is available in DFN0603-2L package. Standard products are Pb-free and Halogen-free.

**Order information**

Device	Package	Shipping
APED5.0M9.0-06	DFN0603-2L	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



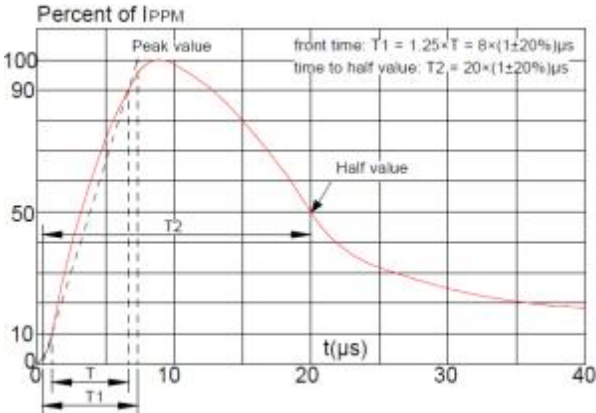
**Absolute maximum ratings**

Parameter	Symbol	Rating	Unit
Peak pulse power (tp = 8/20μs)	Ppk	80	W
Peak pulse current (tp = 8/20μs)	I <sub>PP</sub>	9.0	A
ESD according to IEC61000-4-2 air discharge	V <sub>ESD</sub>	±30	kV
ESD according to IEC61000-4-2 contact discharge		±30	kV
Junction temperature	T <sub>J</sub>	150	℃
Operating temperature	T <sub>OP</sub>	-55~125	℃
Storage temperature	T <sub>STG</sub>	-55~150	℃

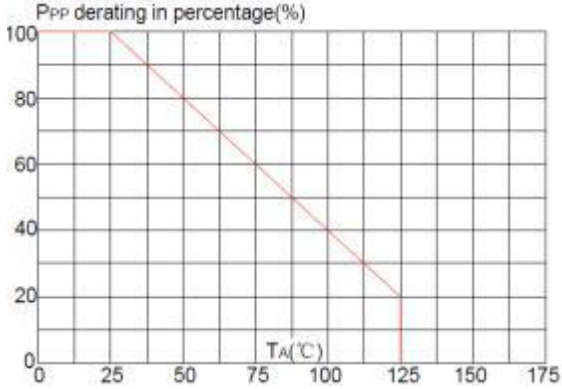
**Electronics characteristics (Ta=25℃)**

Parameter	Symbol	Condition	Min	Typ	Max	Units
Reverse Stand-off Voltage	V <sub>RWM</sub>				5.0	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>t</sub> =1mA	5.6	6.1	8.0	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>RWM</sub> =±5.0V			0.1	μA
Clamping Voltage	V <sub>C</sub>	I <sub>pp</sub> =9.0A, t <sub>p</sub> =8/20us			11	V
Junction Capacitance	C <sub>j</sub>	V <sub>R</sub> =0V, f=1MHz		19		pF

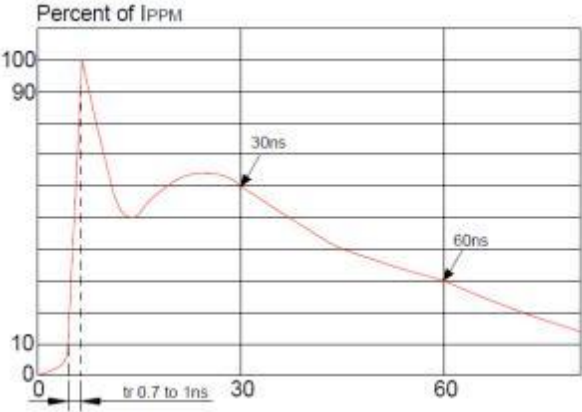
Typical characteristics (Ta=25°C)



Pulse Waveform (8/20us)

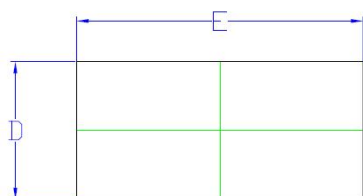


Pulse Derating Curve

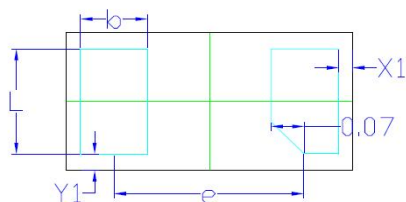


ESD Clamping(8kV Contact Discharge )

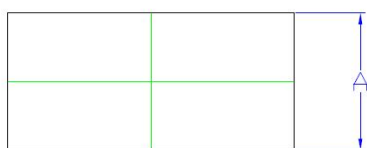
**PACKAGE OUTLINE DIMENSIONS(DFN0603-2L)**



TOP VIEW



BOTTOM VIEW



SIDE VIEW

Type	Dimensions		Unit mm
	Min	Nom	Max
A	0.280	0.300	0.320
b	0.165	0.190	0.215
D	0.250	0.300	0.350
E	0.550	0.600	0.650
e		0.380	
L	0.210	0.230	0.250
X1	0.02	---	0.05
Y1	0.02	---	0.05

**Note:**

This recommended land pattern is for reference purpose only.