

**APPEARANCE**



DFN1006-2L (Bottom View)

**PIN CONFIGURATION**



Pin configuration (Top view)

**Descriptions**

The APED4.5H36-10 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 APED4.5H36-10 is safely dissipating ESD strikes to meet the ESD immunity testing of IEC61000-4-2 ( $\pm 30KV$ ).

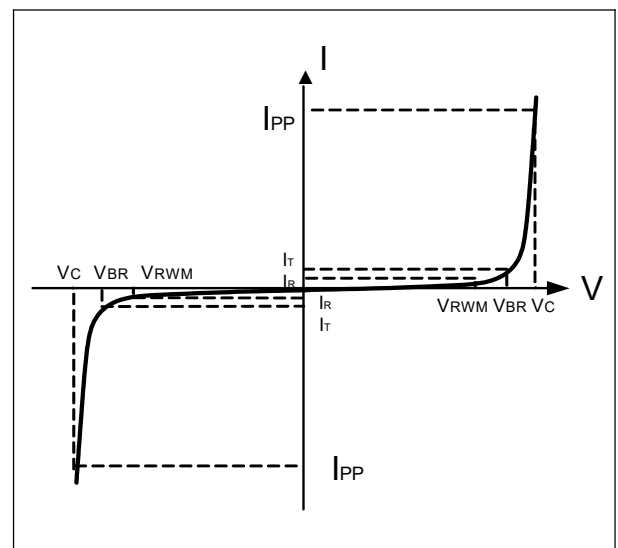
The APED4.5H36-10 is available in DFN1006-2L package. Standard products are Pb-free and Halogen-free.

**Order information**

Device	Package	Shipping
APED4.5H36-10	DFN1006-2L	10000/Tape&Reel

**Electrical Parameters (T=25 $\text{^\circ}$ 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



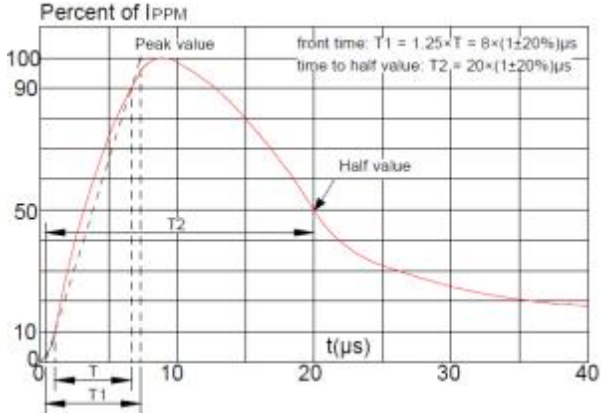
**Absolute maximum ratings**

Parameter	Symbol	Rating	Unit
Peak pulse power (tp = 8/20μs)	Ppk	560	W
Peak pulse current (tp = 8/20μs)	I <sub>PP</sub>	36	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	°C
Operating temperature	T <sub>OP</sub>	-55~125	°C
Storage temperature	T <sub>STG</sub>	-55~150	°C

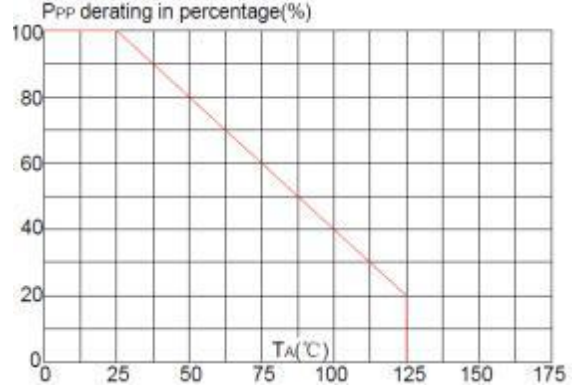
**Electronics characteristics (Ta=25°C)**

Parameter	Symbol	Condition	Min	Typ	Max	Units
Reverse Stand-off Voltage	VRWM				4.5	V
Reverse Breakdown Voltage	VBR	I <sub>t</sub> =1mA	4.6		6.0	V
Reverse Leakage Current	I <sub>R</sub>	VRWM=±4.5V			0.2	μA
Clamping Voltage	V <sub>C</sub>	I <sub>pp</sub> =36A, tp=8/20us			16	V
Junction Capacitance	C <sub>j</sub>	VR=0V, f=1MHz		71		pF

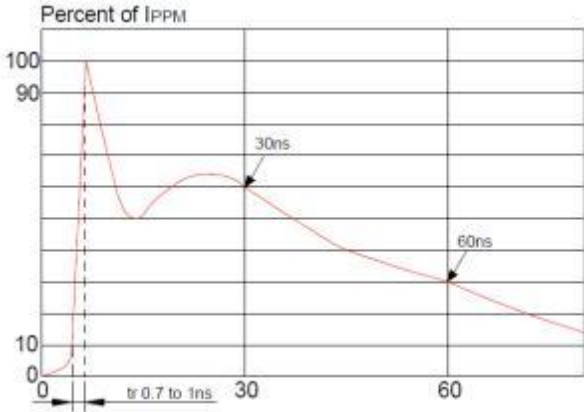
Typical characteristics (Ta=25°C)



Pulse Waveform (8/20us)

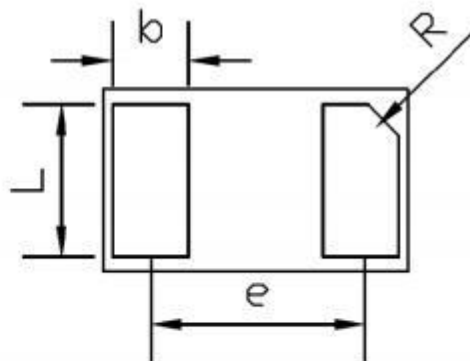
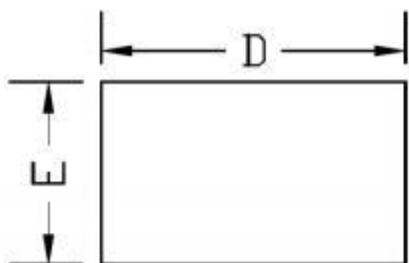


Pulse Derating Curve



ESD Clamping(8kV Contact Discharge )

**PACKAGE OUTLINE DIMENSIONS(DFN1006-2L)**



TOP VIEW

BOTTOM VIEW



SIDE 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.