

### Discription

The HPESDEC2XD5VBF protects sensitive semiconductor components from damage or upset due to electrostatic discharge (ESD) and other voltage induced transient events. Excellent clamping capability, low leakage, low capacitance, and fast response time provide best in class protection on designs that are exposed to ESD.

It gives designer the flexibility to protect one bi-directional line in applications where arrays are not practical.

#### 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 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 and Halogen Free.

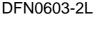
#### **Orderingin formation**

Product ID	Pack	Qty(PCS)
HPESDEC2XD5VBF	DFN0603-2L	15000

## Absolute Ratings(Tamb = 25°C)

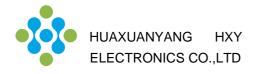
Symbol	Parameter	Value	Units
P <sub>PP</sub>	Peak Pulse Power (t <sub>P</sub> = 8/20µs)	75	W
TL	Maximum lead temperature for soldering during 10s	260	°C
T <sub>stg</sub>	Storage Temperature Range	-55 to +150	°C
T <sub>op</sub>	Operating Temperature Range	-40 to +125	°C
Tj	Maximum junction temperature	150	°C
	IEC61000-4-2 (ESD) air discharge contact discharge		ΚV







Circuit Diagram



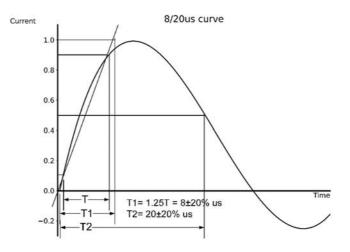
## **Electrical Characteristics**

V <sub>RWM</sub> (V)	I <sub>R</sub> (uA) @ V <sub>RWM</sub>	V <sub>BR</sub> (V)@ I <sub>T</sub> (Note 1)	Ι <sub>τ</sub>	V <sub>C</sub> (V) @ I <sub>PP</sub> =1 A*	V <sub>c</sub> (V) @ Max I <sub>PP</sub> *	І <sub>РР</sub> (А)*	Р <sub>РК</sub> (W)*	C (pF)
Max	Max	Min	mA	Тур	Max	Мах	Мах	Мах
5.0	1.0	6.0	1	15	25	3	75	0.25

\*Surge current waveform per Figure 1.

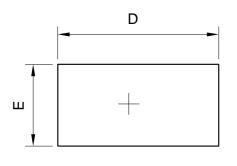
1.  $V_{BR}$  is measured with a pluse test current  $I_T$  at an ambient temperature of  $25^{\circ}$ C.

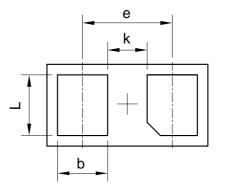
## **Typical Characteristics**





## **Outline And Dimensions**





BOTTOM VVIEW

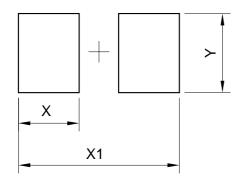
DFN0603-2L					
Dim	Min	Тур.	Max		
D	0.58	0.61	0.64		
E	0.28	0.31	0.34		
е	-	0.34	-		
L	0.20	0.23	0.26		
b	0.16	0.19	0.22		
А	0.25	0.28	0.31		
k	0.12	0.15	0.18		
All Dimensions in mm					



SSIDE VIEW

TOP VIEW

## **Soledering Footprint**



DFN0603-2L		
DIM (mm)		
Х	0.23	
X1	0.61	
Y	0.30	



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