

### Discription

The HDI5315-02F 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 2 unidirectional

line in applications where arrays are not practical.

## Features

- ★ Low Leakage
- ★ Response Time is Typically < 1 ns
- ★ ESD Rating of Class 3 per Human Body Model
- ★ IEC61000-4-2 Level 4 ESD Protection
- ★ We declare that the material of product compliant with RoHS requirements and Halogen Free.

### **Orderingin formation**

<u> </u>				
Product ID	Pack	Qty(PCS)		
HDI5315-02F	DFN1006-3L	10000		

### Absolute Ratings(Tamb = 25°C)

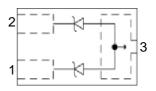
Rating	Symbol	Value	Unit
IEC 61000-4-2 (ESD) Air discharge Contact discharge		±16 ±10	kV kV
Total Power Dissipation on FR-5 Board (Note 1) @ $T_A=25^{\circ}C$	PD	200	mW
Junction and Storage Temperature Range	TJ,TSTG	-55 to 150	°C
Lead Solder Temperature – Maximum (10	TL	260	°C
Second Duration)			

Stresses exceeding Maximum Ratings may damage the device. Maximum Rating are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

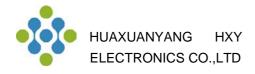
1. FR-5 = 1.0\*0.75\*0.62 in.



DFN1006-3L



Circuit Diagram



### **Electrical Characteristics**

	V <sub>RWM</sub> (V)	I <sub>R</sub> (μΑ) @ V <sub>RWM</sub>	V <sub>BR</sub> (V) @ Ӊ (Note 2)	ΙŢ	V <sub>C</sub> (V) @ I <sub>PP</sub> = 1 A (Note 3)	V <sub>C</sub> (V) @MAX I <sub>PP</sub> (Note 3)	I <sub>PP</sub> (A) (Note 3)	<b>Р<sub>РК</sub>(W)</b> (Note 3)	C (pF)
Device	Max	Max	Min	mA	Max	Max	Max	Max	Тур
HDI5315-02F	5	0.5	6	1.0	12	20	3	60	0.45

Other voltage available upon request.

2.  $V_{BR}$  is measured with a pulse test current IT at an ambient temperature of  $25\,^\circ\!\!\mathbb{C}$ 

3. Surge current waveform per Figure 1.

# **Typical Characteristics**

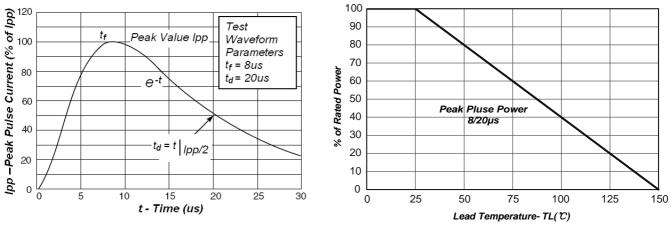
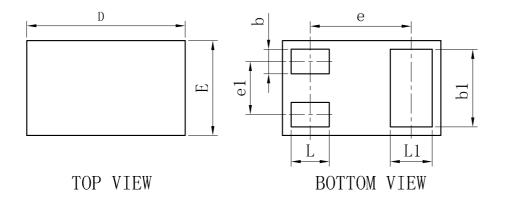


Fig1. Pulse Waveform

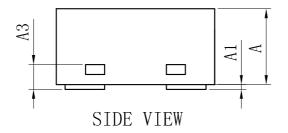
Fig2.Power Derating Curve



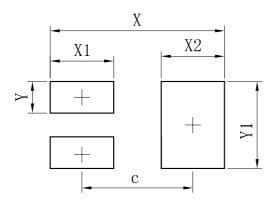
# **Outline And Dimensions**



DFN1006-3L					
Dim	Min	Тур	Max		
D	0.95	1.00	1.05		
Е	0.55	0.60	0.65		
е	-	0.64	-		
e1	-	0.34	-		
L	0.19	0.24	0.29		
L1	0.22	0.27	0.32		
b	0.10	0.15	0.20		
b1	0.44	0.49	0.54		
А	0.43	0.48	0.53		
A1	0	_	0.05		
All Dimensions in mm					



# **Soledering Footprint**



Dimensions	(mm)
с	0.70
Х	1.10
X1	0.40
X2	0.40
Y	0.20
Y1	0.55



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