## 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.

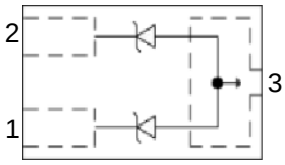
It gives designer the flexibility to protect 2 unidirectional line in applications where arrays are not practical.




DFN1006-3L

## 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.




Circuit Diagram

## Ordering information

| 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<br>Contact discharge | | ±16<br>±10 | kV<br>kV |
| Total Power Dissipation on FR-5 Board (Note 1) @ $T_A$=25℃ | PD | 200 | mW |
| Junction and Storage Temperature Range | TJ,TSTG | -55 to 150 | ℃ |
| Lead Solder Temperature – Maximum (10 Second Duration) | TL | 260 | ℃ |

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.

## Electrical Characteristics

| Device | $V_{RWM}$ (V) | $I_R$ (μA) @ $V_{RWM}$ | $V_{BR}$ (V) @ $I_T$ (Note 2) | $I_T$ | $V_C$ (V) @ $I_{PP}$ = 1 A (Note 3) | $V_C$ (V) @MAX $I_{PP}$ (Note 3) | $I_{PP}$(A) (Note 3) | $P_{PK}$(W) (Note 3) | C (pF) |
|---|---|---|---|---|---|---|---|---|---|
| | Max | Max | Min | mA | Max | Max | Max | Max | Typ |
| 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℃

3. Surge current waveform per Figure 1.

## Typical Characteristics

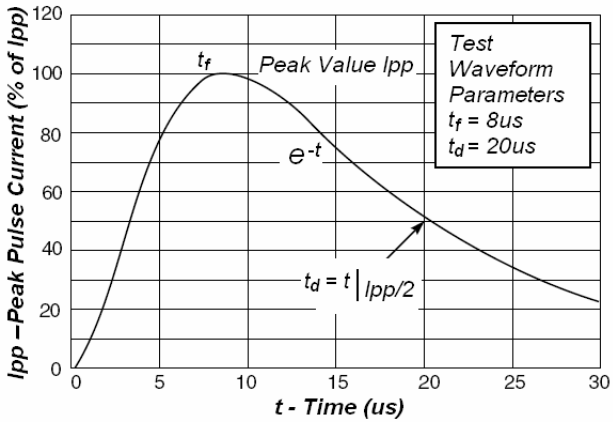



Fig1. Pulse Waveform

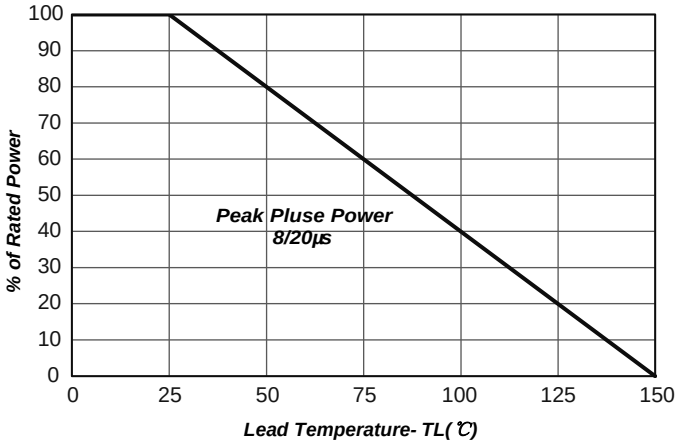
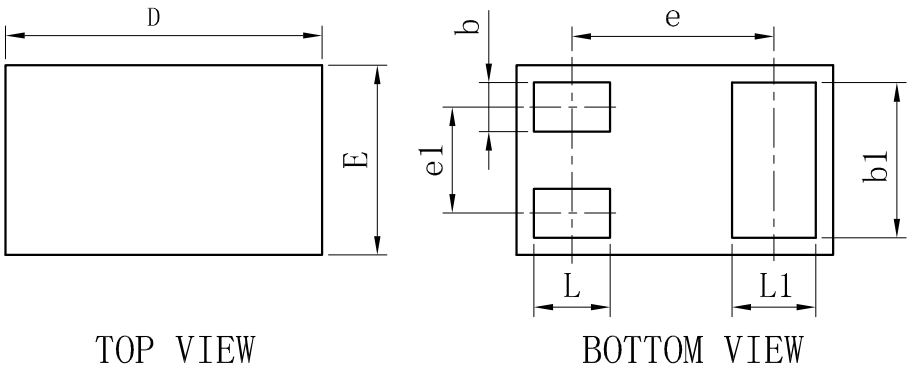
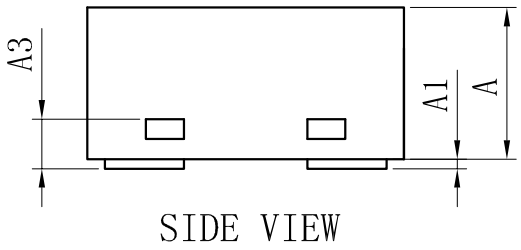



Fig2.Power Derating Curve

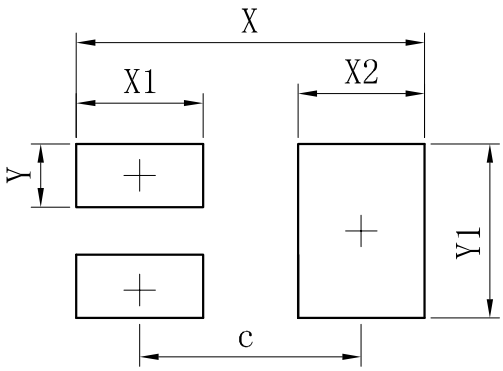
## Outline And Dimensions




| DFN1006-3L | | | |
|---|---|---|---|
| Dim | Min | Typ | Max |
| D | 0.95 | 1.00 | 1.05 |
| E | 0.55 | 0.60 | 0.65 |
| e | - | 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 |
| A | 0.43 | 0.48 | 0.53 |
| A1 | 0 | - | 0.05 |
| All Dimensions in mm | | | |




## Soledering Footprint




| Dimensions | (mm) |
|---|---|
| c | 0.70 |
| X | 1.10 |
| X1 | 0.40 |
| X2 | 0.40 |
| Y | 0.20 |
| Y1 | 0.55 |

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Global Electronic Components Distributor

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## HXY MOSFET:

AOD403-HXY MJD127G PTVSHC3D5VU BD237STU DMPH6250SQ-13 S3D08065E C3M0040120D DSC06065 E4D10120A HBAS40-05LT1G SG3525-HXY SGM3798YG/TR TLV74318PDBVR-HXY 1SMB5930BT3G IRLML2244TRPBF-HXY MSC040SMA120B4 MUR1040FCT SS5150 2N7002-HXY C4D08120E-TR ISL28133FHZ-T7 S4D15120H TPD1E0B04DPYR TPS7A0533PDBZR-HXY 1SMB5934B CH440G IDL10G65C5XUMA2 C6D06065Q-TR ISL28233FUZ-T7 Si2323DS-T1-E3-HXY