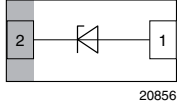




Single-Line ESD-Protection Diode in DFN1006-2A



MARKING (example only)



Bar = cathode marking
X = date code
YY = type code (see table below)

FEATURES

- Compact DFN1006-2A package
- Low package height < 0.5 mm
- 1-line unidirectional ESD-protection
- AEC-Q101 qualified available
- Working range 1 V to 33 V
- ESD immunity acc. IEC 61000-4-2
±15 kV to ±30 kV contact discharge
±15 kV to ±30 kV air discharge
- Lead plating: Sn (e3)
- soldering can be checked by standard vision inspection
- AOI = Automated Optical Inspection
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



LINKS TO ADDITIONAL RESOURCES



| ORDERING INFORMATION | | | | | |
|-----------------------|--------------------|--|------------|-----------------------------|-------------------------|
| PART NUMBER (EXAMPLE) | AEC-Q101 QUALIFIED | ENVIRONMENTAL AND QUALITY CODE | | | ORDERING CODE (EXAMPLE) |
| | | RoHS COMPLIANT + LEAD (Pb)-FREE TERMINATIONS | TIN PLATED | 10K PER 7" REEL (8 mm TAPE) | |
| | | GREEN | | MOQ = 10K/BOX | |
| VESD05C1-HD1 | - | G | 3 | -08 | VESD05C1-HD1-G3-08 |
| VESD05C1-HD1 | H | G | 3 | -08 | VESD05C1-HD1HG3-08 |

| PACKAGE DATA | | | | | | |
|--------------|--------------|-----------|---------|--------------------------------------|-----------------------------------|------------------------------|
| DEVICE NAME | PACKAGE NAME | TYPE CODE | WEIGHT | MOLDING COMPOUND FLAMMABILITY RATING | MOISTURE SENSITIVITY LEVEL | SOLDERING CONDITIONS |
| VESD01C1-HD1 | DFN1006-2A | 2A | 0.83 mg | UL 94 V-0 | MSL level 1 (according J-STD-020) | Peak temperature max. 260 °C |
| VESD03C1-HD1 | | 2B | | | | |
| VESD05C1-HD1 | | 2G | | | | |
| VESD08C1-HD1 | | 2D | | | | |
| VESD12C1-HD1 | | 2E | | | | |
| VESD16C1-HD1 | | 2H | | | | |
| VESD26C1-HD1 | | 2J | | | | |
| VESD33C1-HD1 | | 2K | | | | |



| ABSOLUTE MAXIMUM RATINGS VESD01C1-HD1 (T _{amb} = 25 °C, unless otherwise specified) | | | | |
|--|---|------------------|-------------|------|
| PARAMETER | TEST CONDITIONS | SYMBOL | VALUE | UNIT |
| Peak pulse current | Acc. IEC 61000-4-5, 8/20 μs/single shot | I _{PPM} | 11 | A |
| Peak pulse power | Acc. IEC 61000-4-5, 8/20 μs/single shot | P _{PP} | 100 | W |
| ESD immunity | Contact discharge acc. IEC 61000-4-2; 10 pulses | V _{ESD} | 30 | kV |
| | Air discharge acc. IEC 61000-4-2; 10 pulses | | 30 | kV |
| Operating temperature | Junction temperature | T _J | -55 to +150 | °C |
| Storage temperature | | T _{stg} | -65 to +150 | °C |

| ABSOLUTE MAXIMUM RATINGS VESD03C1-HD1 (T _{amb} = 25 °C, unless otherwise specified) | | | | |
|--|---|------------------|-------------|------|
| PARAMETER | TEST CONDITIONS | SYMBOL | VALUE | UNIT |
| Peak pulse current | Acc. IEC 61000-4-5, 8/20 μs/single shot | I _{PPM} | 11.6 | A |
| Peak pulse power | Acc. IEC 61000-4-5, 8/20 μs/single shot | P _{PP} | 100 | W |
| ESD immunity | Contact discharge acc. IEC 61000-4-2; 10 pulses | V _{ESD} | 30 | kV |
| | Air discharge acc. IEC 61000-4-2; 10 pulses | | 30 | kV |
| Operating temperature | Junction temperature | T _J | -55 to +150 | °C |
| Storage temperature | | T _{stg} | -65 to +150 | °C |

| ABSOLUTE MAXIMUM RATINGS VESD05C1-HD1 (T _{amb} = 25 °C, unless otherwise specified) | | | | |
|--|---|------------------|-------------|------|
| PARAMETER | TEST CONDITIONS | SYMBOL | VALUE | UNIT |
| Peak pulse current | Acc. IEC 61000-4-5, 8/20 μs/single shot | I _{PPM} | 8.7 | A |
| Peak pulse power | Acc. IEC 61000-4-5, 8/20 μs/single shot | P _{PP} | 100 | W |
| ESD immunity | Contact discharge acc. IEC 61000-4-2; 10 pulses | V _{ESD} | 30 | kV |
| | Air discharge acc. IEC 61000-4-2; 10 pulses | | 30 | kV |
| Operating temperature | Junction temperature | T _J | -55 to +150 | °C |
| Storage temperature | | T _{stg} | -65 to +150 | °C |

| ABSOLUTE MAXIMUM RATINGS VESD08C1-HD1 (T _{amb} = 25 °C, unless otherwise specified) | | | | |
|--|---|------------------|-------------|------|
| PARAMETER | TEST CONDITIONS | SYMBOL | VALUE | UNIT |
| Peak pulse current | Acc. IEC 61000-4-5, 8/20 μs/single shot | I _{PPM} | 6.60 | A |
| Peak pulse power | Acc. IEC 61000-4-5, 8/20 μs/single shot | P _{PP} | 100 | W |
| ESD immunity | Contact discharge acc. IEC 61000-4-2; 10 pulses | V _{ESD} | 30 | kV |
| | Air discharge acc. IEC 61000-4-2; 10 pulses | | 30 | kV |
| Operating temperature | Junction temperature | T _J | -55 to +150 | °C |
| Storage temperature | | T _{stg} | -65 to +150 | °C |



| ABSOLUTE MAXIMUM RATINGS VESD12C1-HD1 (T _{amb} = 25 °C, unless otherwise specified) | | | | |
|--|---|------------------|-------------|------|
| PARAMETER | TEST CONDITIONS | SYMBOL | VALUE | UNIT |
| Peak pulse current | Acc. IEC 61000-4-5, 8/20 μs/single shot | I _{PPM} | 4.4 | A |
| Peak pulse power | Acc. IEC 61000-4-5, 8/20 μs/single shot | P _{PP} | 100 | W |
| ESD immunity | Contact discharge acc. IEC 61000-4-2; 10 pulses | V _{ESD} | 30 | kV |
| | Air discharge acc. IEC 61000-4-2; 10 pulses | | 30 | kV |
| Operating temperature | Junction temperature | T _J | -55 to +150 | °C |
| Storage temperature | | T _{stg} | -65 to +150 | °C |

| ABSOLUTE MAXIMUM RATINGS VESD16C1-HD1 (T _{amb} = 25 °C, unless otherwise specified) | | | | |
|--|---|------------------|-------------|------|
| PARAMETER | TEST CONDITIONS | SYMBOL | VALUE | UNIT |
| Peak pulse current | Acc. IEC 61000-4-5, 8/20 μs/single shot | I _{PPM} | 3.6 | A |
| Peak pulse power | Acc. IEC 61000-4-5, 8/20 μs/single shot | P _{PP} | 100 | W |
| ESD immunity | Contact discharge acc. IEC 61000-4-2; 10 pulses | V _{ESD} | 30 | kV |
| | Air discharge acc. IEC 61000-4-2; 10 pulses | | 30 | kV |
| Operating temperature | Junction temperature | T _J | -55 to +150 | °C |
| Storage temperature | | T _{stg} | -65 to +150 | °C |

| ABSOLUTE MAXIMUM RATINGS VESD26C1-HD1 (T _{amb} = 25 °C, unless otherwise specified) | | | | |
|--|---|------------------|-------------|------|
| PARAMETER | TEST CONDITIONS | SYMBOL | VALUE | UNIT |
| Peak pulse current | Acc. IEC 61000-4-5, 8/20 μs/single shot | I _{PPM} | 2.1 | A |
| Peak pulse power | Acc. IEC 61000-4-5, 8/20 μs/single shot | P _{PP} | 100 | W |
| ESD immunity | Contact discharge acc. IEC 61000-4-2; 10 pulses | V _{ESD} | 20 | kV |
| | Air discharge acc. IEC 61000-4-2; 10 pulses | | 20 | kV |
| Operating temperature | Junction temperature | T _J | -55 to +150 | °C |
| Storage temperature | | T _{stg} | -65 to +150 | °C |

| ABSOLUTE MAXIMUM RATINGS VESD33C1-HD1 (T _{amb} = 25 °C, unless otherwise specified) | | | | |
|--|---|------------------|-------------|------|
| PARAMETER | TEST CONDITIONS | SYMBOL | VALUE | UNIT |
| Peak pulse current | Acc. IEC 61000-4-5, 8/20 μs/single shot | I _{PPM} | 1.6 | A |
| Peak pulse power | Acc. IEC 61000-4-5, 8/20 μs/single shot | P _{PP} | 100 | W |
| ESD immunity | Contact discharge acc. IEC 61000-4-2; 10 pulses | V _{ESD} | 15 | kV |
| | Air discharge acc. IEC 61000-4-2; 10 pulses | | 15 | kV |
| Operating temperature | Junction temperature | T _J | -55 to +150 | °C |
| Storage temperature | | T _{stg} | -65 to +150 | °C |



| ELECTRICAL CHARACTERISTICS VESD01C1-HD1 ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified) | | | | | | |
|--|---|---------------|------|------|------|---------------|
| PARAMETER | TEST CONDITIONS / REMARKS | SYMBOL | MIN. | TYP. | MAX. | UNIT |
| Protection paths | Number of lines which can be protected | $N_{channel}$ | - | - | 1 | lines |
| Reverse stand off voltage | Max. reverse working voltage | V_{RWM} | - | - | 1 | V |
| Reverse voltage | at $I_R = 100\text{ }\mu\text{A}$ | V_R | 1 | 1.2 | - | V |
| Reverse current | at $V_R = 1\text{ V}$ | I_R | - | 20 | 100 | μA |
| Reverse breakdown voltage | at $I_R = 5\text{ mA}$ | V_{BR} | 2.55 | 2.7 | 2.85 | V |
| Reverse clamping voltage | at $I_{PP} = I_{PPM} = 11\text{ A}$, $t_p = 8/20\text{ }\mu\text{s}$ | V_C | - | 6.4 | 6.9 | V |
| Forward clamping voltage | at $I_{PP} = 1\text{ A}$, $t_p = 300\text{ }\mu\text{s}$ | V_F | 0.9 | 1.1 | 1.2 | V |
| | at $I_{PP} = I_{PPM} = 11\text{ A}$, $t_p = 8/20\text{ }\mu\text{s}$ | V_F | - | 3.2 | 3.92 | V |
| Dynamic resistance | $t_p = 100\text{ ns}$ (TLP; pin 2-1) | r_{dyn} | - | 0.13 | - | Ω |
| Capacitance | at $V_R = 0\text{ V}$; $f = 1\text{ MHz}$ | C_D | 153 | 192 | 230 | pF |

| ELECTRICAL CHARACTERISTICS VESD03C1-HD1 ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified) | | | | | | |
|--|---|---------------|------|------|------|---------------|
| PARAMETER | TEST CONDITIONS / REMARKS | SYMBOL | MIN. | TYP. | MAX. | UNIT |
| Protection paths | Number of lines which can be protected | $N_{channel}$ | - | - | 1 | lines |
| Reverse stand off voltage | Max. reverse working voltage | V_{RWM} | - | - | 3 | V |
| Reverse voltage | at $I_R = 80\text{ }\mu\text{A}$ | V_R | 3 | - | - | V |
| Reverse current | at $V_R = 3\text{ V}$ | I_R | - | 30 | 80 | μA |
| Reverse breakdown voltage | at $I_R = 5\text{ mA}$ | V_{BR} | 4.45 | 4.7 | 4.95 | V |
| Reverse clamping voltage | at $I_{PP} = I_{PPM} = 11.6\text{ A}$, $t_p = 8/20\text{ }\mu\text{s}$ | V_C | - | 7.8 | 8.70 | V |
| Forward clamping voltage | at $I_{PP} = 1\text{ A}$, $t_p = 300\text{ }\mu\text{s}$ | V_F | 0.9 | 1.1 | 1.2 | V |
| | at $I_{PP} = I_{PPM} = 11.6\text{ A}$, $t_p = 8/20\text{ }\mu\text{s}$ | V_F | - | 2.6 | 3.32 | V |
| Dynamic resistance | $t_p = 100\text{ ns}$ (TLP; pin 2-1) | r_{dyn} | - | 0.19 | - | Ω |
| Capacitance | at $V_R = 0\text{ V}$; $f = 1\text{ MHz}$ | C_D | 89 | 112 | 135 | pF |

| ELECTRICAL CHARACTERISTICS VESD05C1-HD1 ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified) | | | | | | |
|--|--|---------------|------|------|------|---------------|
| PARAMETER | TEST CONDITIONS / REMARKS | SYMBOL | MIN. | TYP. | MAX. | UNIT |
| Protection paths | Number of lines which can be protected | $N_{channel}$ | - | - | 1 | lines |
| Reverse stand off voltage | Max. reverse working voltage | V_{RWM} | - | - | 5 | V |
| Reverse voltage | at $I_R = 1\text{ }\mu\text{A}$ | V_R | 5 | - | - | V |
| Reverse current | at $V_R = 5\text{ V}$ | I_R | - | 0.01 | 0.1 | μA |
| Reverse breakdown voltage | at $I_R = 1\text{ mA}$ | V_{BR} | 7.1 | 7.5 | 7.9 | V |
| Reverse clamping voltage | at $I_{PP} = I_{PPM} = 8.7\text{ A}$, $t_p = 8/20\text{ }\mu\text{s}$ | V_C | - | 10.3 | 11.5 | V |
| Forward clamping voltage | at $I_{PP} = 1\text{ A}$, $t_p = 300\text{ }\mu\text{s}$ | V_F | 0.9 | 1.1 | 1.2 | V |
| | at $I_{PP} = I_{PPM} = 8.7\text{ A}$, $t_p = 8/20\text{ }\mu\text{s}$ | V_F | - | 2.2 | 2.74 | V |
| Dynamic resistance | $t_p = 100\text{ ns}$ (TLP; pin 2-1) | r_{dyn} | - | 0.2 | - | Ω |
| Capacitance | at $V_R = 0\text{ V}$; $f = 1\text{ MHz}$ | C_D | 53 | 67 | 81 | pF |



| ELECTRICAL CHARACTERISTICS VESD08C1-HD1 ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified) | | | | | | |
|--|--|---------------|------|------|------|---------------|
| PARAMETER | TEST CONDITIONS / REMARKS | SYMBOL | MIN. | TYP. | MAX. | UNIT |
| Protection paths | Number of lines which can be protected | $N_{channel}$ | - | - | 1 | lines |
| Reverse stand off voltage | Max. reverse working voltage | V_{RWM} | - | - | 8 | V |
| Reverse voltage | at $I_R = 0.1\text{ }\mu\text{A}$ | V_R | 8 | - | - | V |
| Reverse current | at $V_R = 8\text{ V}$ | I_R | - | 0.01 | 0.1 | μA |
| Reverse breakdown voltage | at $I_R = 1\text{ mA}$ | V_{BR} | 9.4 | 9.85 | 10.3 | V |
| Reverse clamping voltage | at $I_{PP} = I_{PPM} = 6.6\text{ A}$, $t_p = 8/20\text{ }\mu\text{s}$ | V_C | - | 13.7 | 15.3 | V |
| Forward clamping voltage | at $I_{PP} = 1\text{ A}$, $t_p = 300\text{ }\mu\text{s}$ | V_F | 0.9 | 1.1 | 1.2 | V |
| | at $I_{PP} = I_{PPM} = 6.6\text{ A}$, $t_p = 8/20\text{ }\mu\text{s}$ | V_F | - | 1.9 | 2.32 | V |
| Dynamic resistance | $t_p = 100\text{ ns}$ (TLP; pin 2-1) | r_{dyn} | - | 0.23 | - | Ω |
| Capacitance | at $V_R = 0\text{ V}$; $f = 1\text{ MHz}$ | C_D | 37 | 47 | 57 | pF |

| ELECTRICAL CHARACTERISTICS VESD12C1-HD1 ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified) | | | | | | |
|--|--|---------------|------|------|------|---------------|
| PARAMETER | TEST CONDITIONS / REMARKS | SYMBOL | MIN. | TYP. | MAX. | UNIT |
| Protection paths | Number of lines which can be protected | $N_{channel}$ | - | - | 1 | lines |
| Reverse stand off voltage | Max. reverse working voltage | V_{RWM} | - | - | 12 | V |
| Reverse voltage | at $I_R = 0.1\text{ }\mu\text{A}$ | V_R | 12 | - | - | V |
| Reverse current | at $V_R = 12\text{ V}$ | I_R | - | 0.01 | 0.1 | μA |
| Reverse breakdown voltage | at $I_R = 1\text{ mA}$ | V_{BR} | 14.3 | 15 | 15.8 | V |
| Reverse clamping voltage | at $I_{PP} = I_{PPM} = 4.4\text{ A}$, $t_p = 8/20\text{ }\mu\text{s}$ | V_C | - | 20.5 | 22.7 | V |
| Forward clamping voltage | at $I_{PP} = 1\text{ A}$, $t_p = 300\text{ }\mu\text{s}$ | V_F | 0.9 | 1.1 | 1.2 | V |
| | at $I_{PP} = I_{PPM} = 4.4\text{ A}$, $t_p = 8/20\text{ }\mu\text{s}$ | V_F | - | 1.6 | 1.88 | V |
| Dynamic resistance | $t_p = 100\text{ ns}$ (TLP; pin 2-1) | r_{dyn} | - | 0.4 | - | Ω |
| Capacitance | at $V_R = 0\text{ V}$; $f = 1\text{ MHz}$ | C_D | 26 | 33 | 40 | pF |

| ELECTRICAL CHARACTERISTICS VESD16C1-HD1 ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified) | | | | | | |
|--|--|---------------|------|------|------|---------------|
| PARAMETER | TEST CONDITIONS / REMARKS | SYMBOL | MIN. | TYP. | MAX. | UNIT |
| Protection paths | Number of lines which can be protected | $N_{channel}$ | - | - | 1 | lines |
| Reverse stand off voltage | Max. reverse working voltage | V_{RWM} | - | - | 16 | V |
| Reverse voltage | at $I_R = 0.1\text{ }\mu\text{A}$ | V_R | 16 | - | - | V |
| Reverse current | at $V_R = 16\text{ V}$ | I_R | - | 0.01 | 0.1 | μA |
| Reverse breakdown voltage | at $I_R = 1\text{ mA}$ | V_{BR} | 17.1 | 18 | 18.9 | V |
| Reverse clamping voltage | at $I_{PP} = I_{PPM} = 3.6\text{ A}$, $t_p = 8/20\text{ }\mu\text{s}$ | V_C | - | 25.3 | 28 | V |
| Forward clamping voltage | at $I_{PP} = 1\text{ A}$, $t_p = 300\text{ }\mu\text{s}$ | V_F | 0.9 | 1.1 | 1.2 | V |
| | at $I_{PP} = I_{PPM} = 3.6\text{ A}$, $t_p = 8/20\text{ }\mu\text{s}$ | V_F | - | 1.5 | 1.72 | V |
| Dynamic resistance | $t_p = 100\text{ ns}$ (TLP; pin 2-1) | r_{dyn} | - | 0.53 | - | Ω |
| Capacitance | at $V_R = 0\text{ V}$; $f = 1\text{ MHz}$ | C_D | 21 | 27 | 33 | pF |



| ELECTRICAL CHARACTERISTICS VESD26C1-HD1 ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified) | | | | | | |
|--|--|---------------|------|--------|------|---------------|
| PARAMETER | TEST CONDITIONS / REMARKS | SYMBOL | MIN. | TYP. | MAX. | UNIT |
| Protection paths | Number of lines which can be protected | $N_{channel}$ | - | - | 1 | lines |
| Reverse stand off voltage | Max. reverse working voltage | V_{RWM} | - | - | 26 | V |
| Reverse voltage | at $I_R = 0.1\text{ }\mu\text{A}$ | V_R | 26 | - | - | V |
| Reverse current | at $V_R = 26\text{ V}$ | I_R | - | < 0.01 | 0.1 | μA |
| Reverse breakdown voltage | at $I_R = 1\text{ mA}$ | V_{BR} | 28.5 | 30 | 31.5 | V |
| Reverse clamping voltage | at $I_{PP} = I_{PPM} = 2.1\text{ A}$, $t_p = 8/20\text{ }\mu\text{s}$ | V_C | - | 43 | 48 | V |
| Forward clamping voltage | at $I_{PP} = 1\text{ A}$, $t_p = 300\text{ }\mu\text{s}$ | V_F | 0.9 | 1.1 | 1.2 | V |
| | at $I_{PP} = I_{PPM} = 2.1\text{ A}$, $t_p = 8/20\text{ }\mu\text{s}$ | V_F | - | 1.3 | 1.42 | V |
| Dynamic resistance | $t_p = 100\text{ ns}$ (TLP; pin 2-1) | r_{dyn} | - | 1.9 | - | Ω |
| Capacitance | at $V_R = 0\text{ V}$; $f = 1\text{ MHz}$ | C_D | 14 | 17.5 | 21 | pF |

| ELECTRICAL CHARACTERISTICS VESD33C1-HD1 ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified) | | | | | | |
|--|--|---------------|------|--------|------|---------------|
| PARAMETER | TEST CONDITIONS / REMARKS | SYMBOL | MIN. | TYP. | MAX. | UNIT |
| Protection paths | Number of lines which can be protected | $N_{channel}$ | - | - | 1 | lines |
| Reverse stand off voltage | Max. reverse working voltage | V_{RWM} | - | - | 33 | V |
| Reverse voltage | at $I_R = 0.1\text{ }\mu\text{A}$ | V_R | 33 | - | - | V |
| Reverse current | at $V_R = 33\text{ V}$ | I_R | - | < 0.01 | 0.1 | μA |
| Reverse breakdown voltage | at $I_R = 1\text{ mA}$ | V_{BR} | 37 | 39 | 41 | V |
| Reverse clamping voltage | at $I_{PP} = I_{PPM} = 1.6\text{ A}$, $t_p = 8/20\text{ }\mu\text{s}$ | V_C | - | 56 | 62.5 | V |
| Forward clamping voltage | at $I_{PP} = 1\text{ A}$, $t_p = 300\text{ }\mu\text{s}$ | V_F | 0.9 | 1.1 | 1.2 | V |
| | at $I_{PP} = I_{PPM} = 1.6\text{ A}$, $t_p = 8/20\text{ }\mu\text{s}$ | V_F | - | 1.22 | 1.32 | V |
| Dynamic resistance | $t_p = 100\text{ ns}$ (TLP; pin 2-1) | r_{dyn} | - | 3.6 | - | Ω |
| Capacitance | at $V_R = 0\text{ V}$; $f = 1\text{ MHz}$ | C_D | 12 | 15 | 18 | pF |

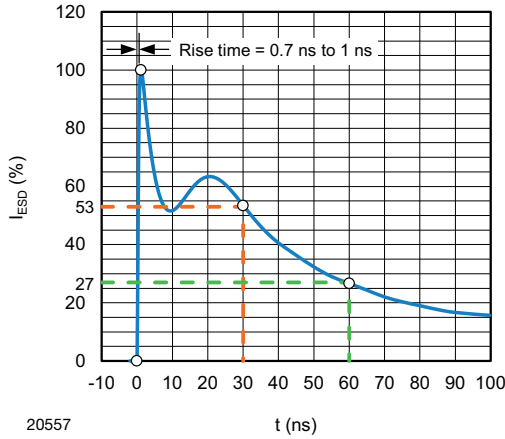


Fig. 1 - ESD Discharge Current Wave Form acc. IEC 61000-4-2 (330 Ω / 150 pF)

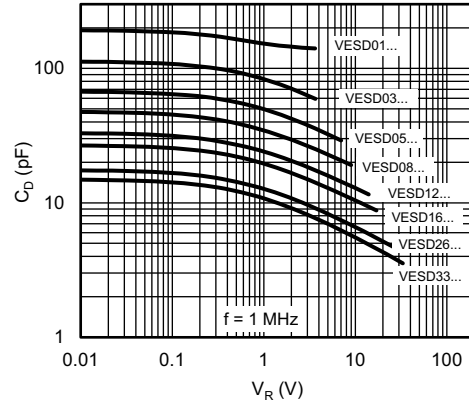


Fig. 4 - Typical Capacitance vs. Reverse Voltage

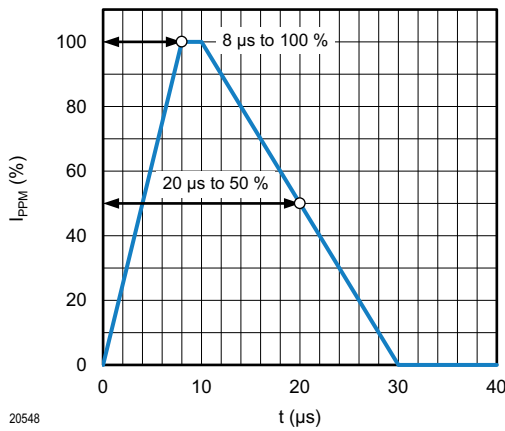


Fig. 2 - 8/20 μs Peak Pulse Current Wave Form acc. IEC 61000-4-5

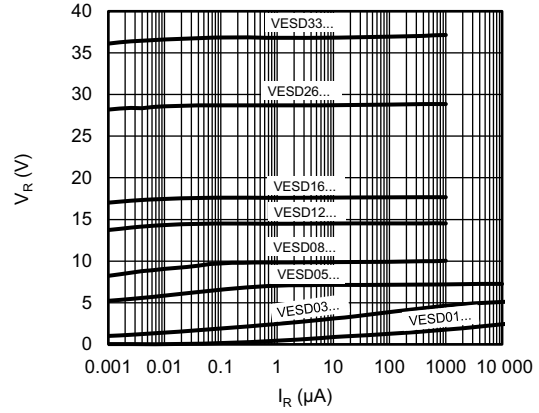


Fig. 5 - Typical Reverse Voltage vs. Reverse Current

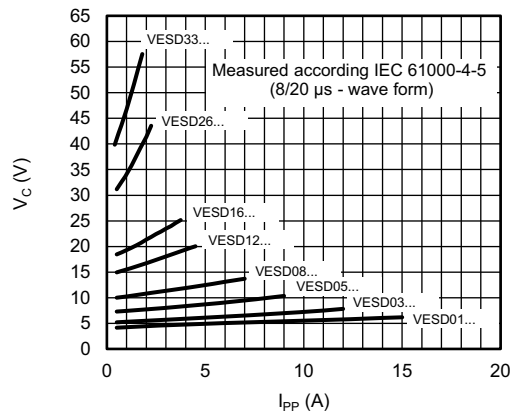


Fig. 3 - Typical Peak Clamping Voltage vs. Peak Pulse Current

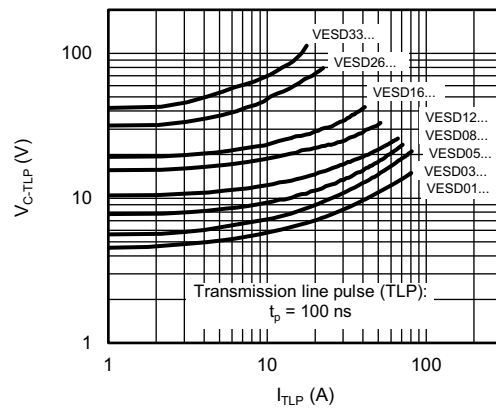


Fig. 6 - Typical Clamping Voltage vs. Peak Pulse Current

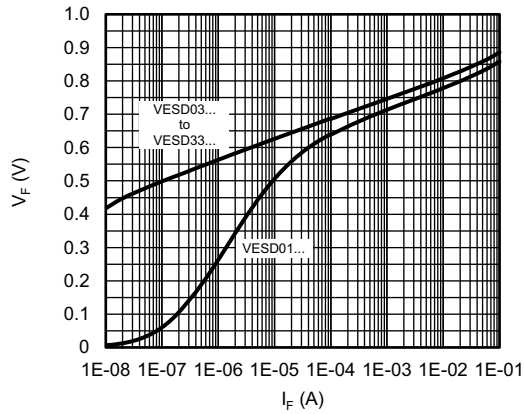


Fig. 7 - Typical Forward Voltage vs. Forward Current

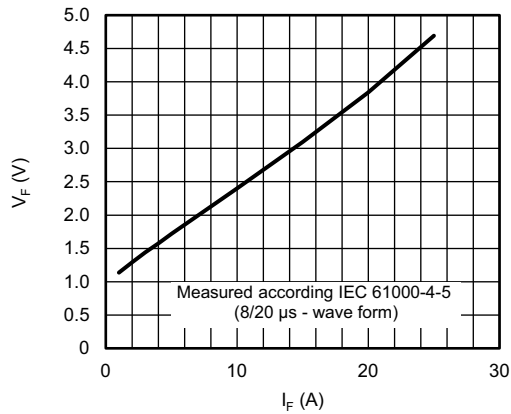
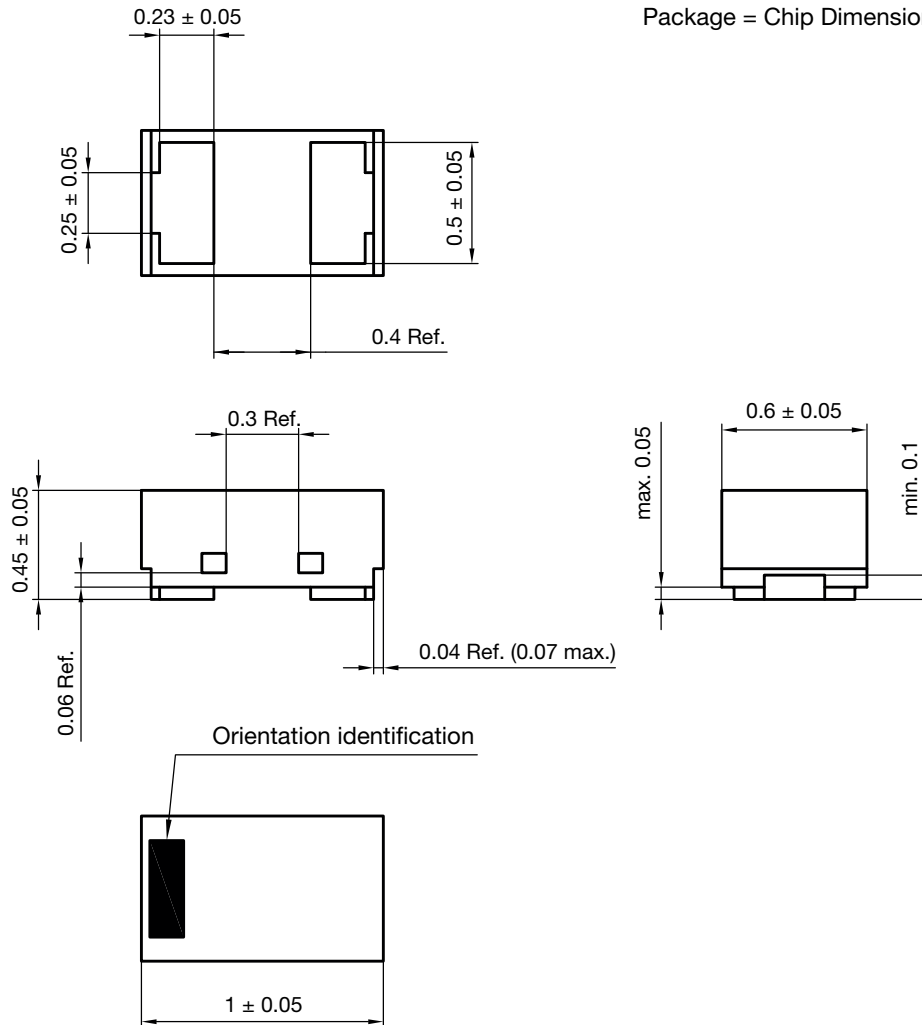


Fig. 8 - Typical Forward Voltage vs. Forward Current

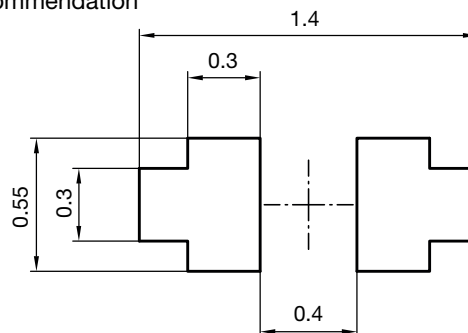


PACKAGE DIMENSIONS in millimeters (Inches): DFN1006-2A

Package = Chip Dimension in mm



Footprint recommendation

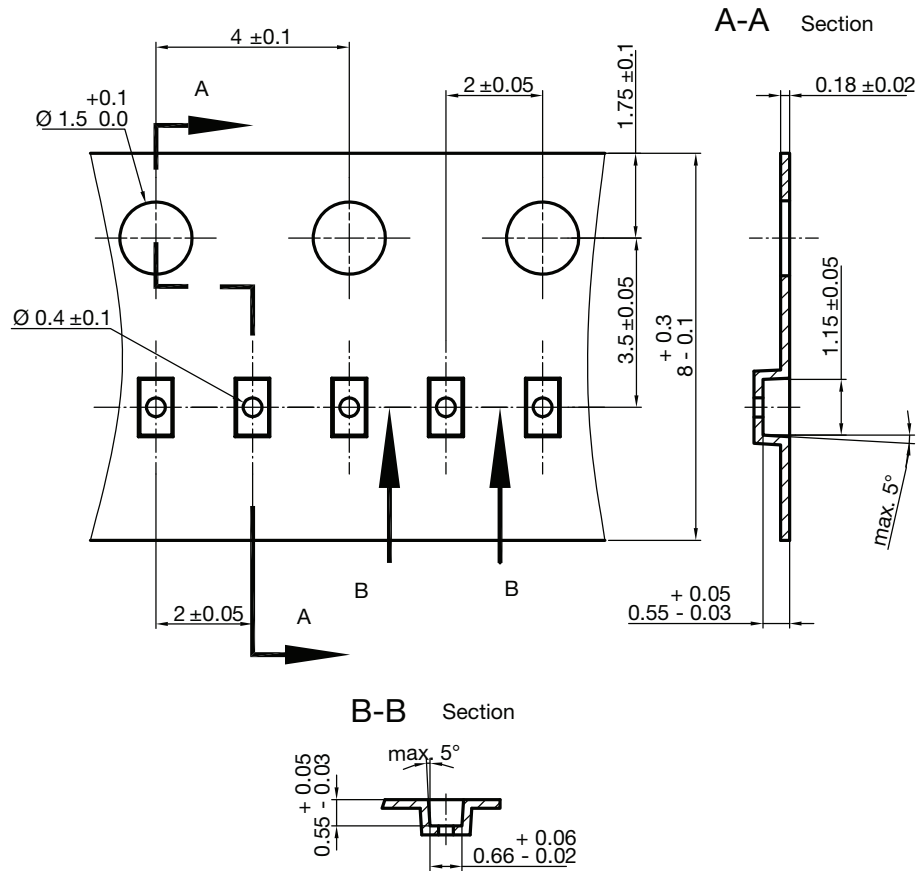


Document no.: S8-V-3906.04-059 (4)
Created - Date: 11-Jul-2018
Rev.5 - Date: 17-Sep-2021

23191



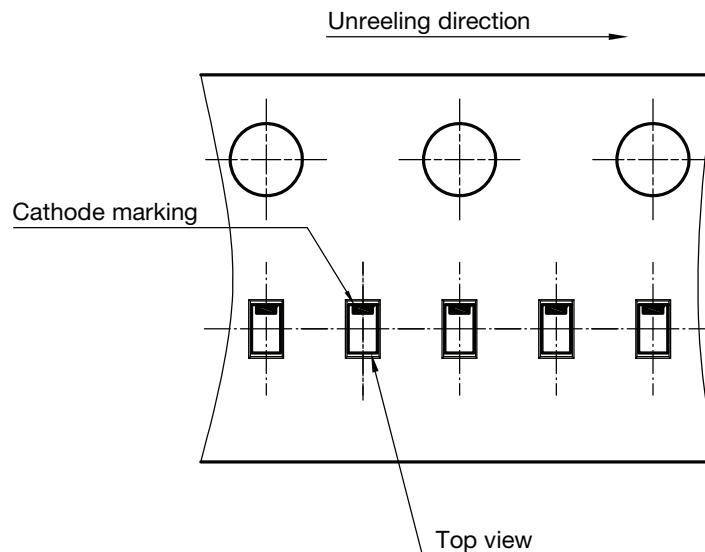
CARRIER TAPE DFN1006-2A



S8-V-3906.04-063 (4)
created 28.10.2019

surface resistance: $10^5 - 10^{11} \frac{\text{OHMS}}{\text{SQ}}$
Cumulative tolerances of 10 sprocket holes is ± 0.2 mm

ORIENTATION IN CARRIER TAPE DFN1006-2A



S8-V-3906.04-064 (4)
created 28.10.2019



Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Hyperlinks included in this datasheet may direct users to third-party websites. These links are provided as a convenience and for informational purposes only. Inclusion of these hyperlinks does not constitute an endorsement or an approval by Vishay of any of the products, services or opinions of the corporation, organization or individual associated with the third-party website. Vishay disclaims any and all liability and bears no responsibility for the accuracy, legality or content of the third-party website or for that of subsequent links.

Vishay products are not designed for use in life-saving or life-sustaining applications or any application in which the failure of the Vishay product could result in personal injury or death unless specifically qualified in writing by Vishay. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.