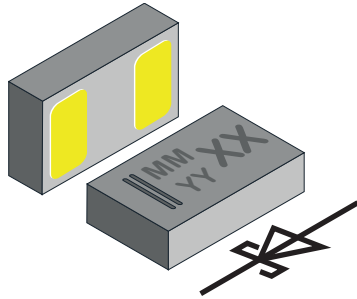




Schottky Rectifier Surface-Mount FlipKY® Gen 2



FEATURES

- Schottky diode for high-speed switching
- Very low dimensions:
1.0 mm x 0.6 mm x 0.29 mm
- 0.5 A forward current
- Low forward voltage drop (typ. 425 mV at 0.5 A)
- Low reverse current (< 15 µA at 10 V)
- Material categorization:
for definitions of compliance please see www.vishay.com/doc?99912



RoHS
COMPLIANT
HALOGEN
FREE
GREEN
(5-2008)

DESIGN SUPPORT TOOLS AVAILABLE



| PARTS TABLE | | | | | | | |
|--------------|--------------------|-----------------------|--------------|-----------|----------|---|------------------------|
| PART | ORDERING CODE | CIRCUIT CONFIGURATION | PACKAGE NAME | TYPE CODE | WEIGHT | TAPED UNITS PER REEL (8 mm TAPE ON 7" REEL) | MINIMUM ORDER QUANTITY |
| VSKY05401006 | VSKY05401006-G4-08 | Single | CLP1006-2L | 4A | 0.400 mg | 10 000 | 10 000 |

| ABSOLUTE MAXIMUM RATINGS (T _{amb} = 25 °C, unless otherwise specified) | | | | | |
|---|-----------------------|--------------------|-------|------|--|
| PARAMETER | TEST CONDITION | SYMBOL | VALUE | UNIT | |
| Maximum repetitive reverse voltage | | V _{RRM} | 40 | V | |
| Maximum average forward rectified current | | I _{F(AV)} | 0.5 | A | |
| Surge forward current | 8.3 ms half sine-wave | I _{FSM} | 12 | A | |
| Power dissipation | Footprint acc. fig. 4 | P _{tot} | 450 | mW | |

| THERMAL CHARACTERISTICS (T _{amb} = 25 °C, unless otherwise specified) | | | | | |
|--|---------------------------------------|-------------------|-------------|------|--|
| PARAMETER | TEST CONDITION | SYMBOL | VALUE | UNIT | |
| Thermal resistance junction to ambient air | Acc. JEDEC® 51-3 footprint acc fig. 4 | R _{thJA} | 280 | K/W | |
| Maximum operating junction temperature | | T _j | 150 | °C | |
| Storage temperature range | | T _{stg} | -65 to +150 | °C | |

| ELECTRICAL CHARACTERISTICS (T _{amb} = 25 °C, unless otherwise specified) | | | | | | |
|---|---------------------------------|----------------|-------|-------|------|--|
| PARAMETER | TEST CONDITION | SYMBOL | TYP. | MAX. | UNIT | |
| Leakage current | V _R = 10 V | I _R | - | 15 | µA | |
| | V _R = 40 V | I _R | - | 75 | µA | |
| Forward voltage | I _F = 100 mA | V _F | 0.330 | 0.360 | V | |
| | I _F = 0.5 A | V _F | 0.425 | 0.460 | V | |
| Diode capacitance | V _R = 0 V, f = 1 MHz | C _D | 140 | - | pF | |

RATINGS AND CHARACTERISTICS CURVES ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)

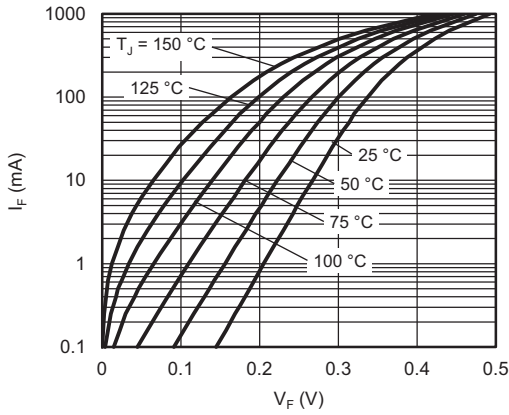


Fig. 1 - Typical Forward Current vs. Forward Voltage

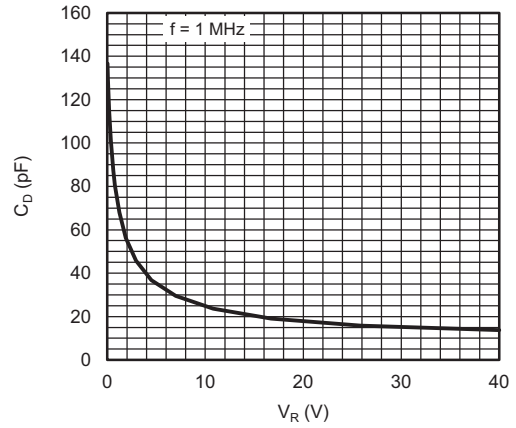


Fig. 3 - Typical Capacitance vs. Reverse Voltage

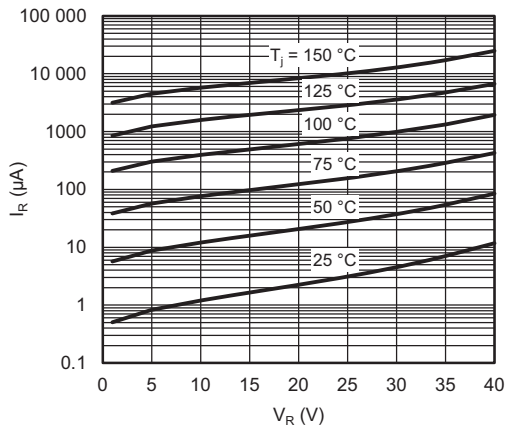


Fig. 2 - Typical Reverse Leakage Current vs. Reverse Voltage

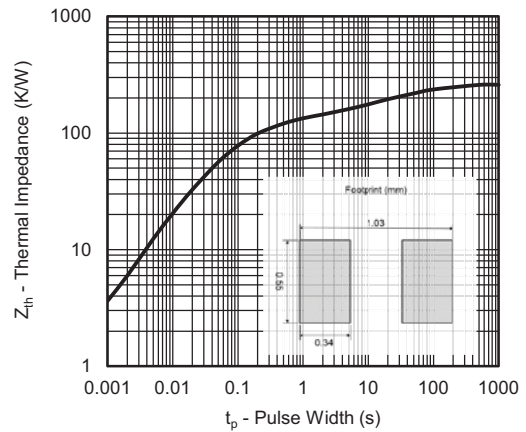
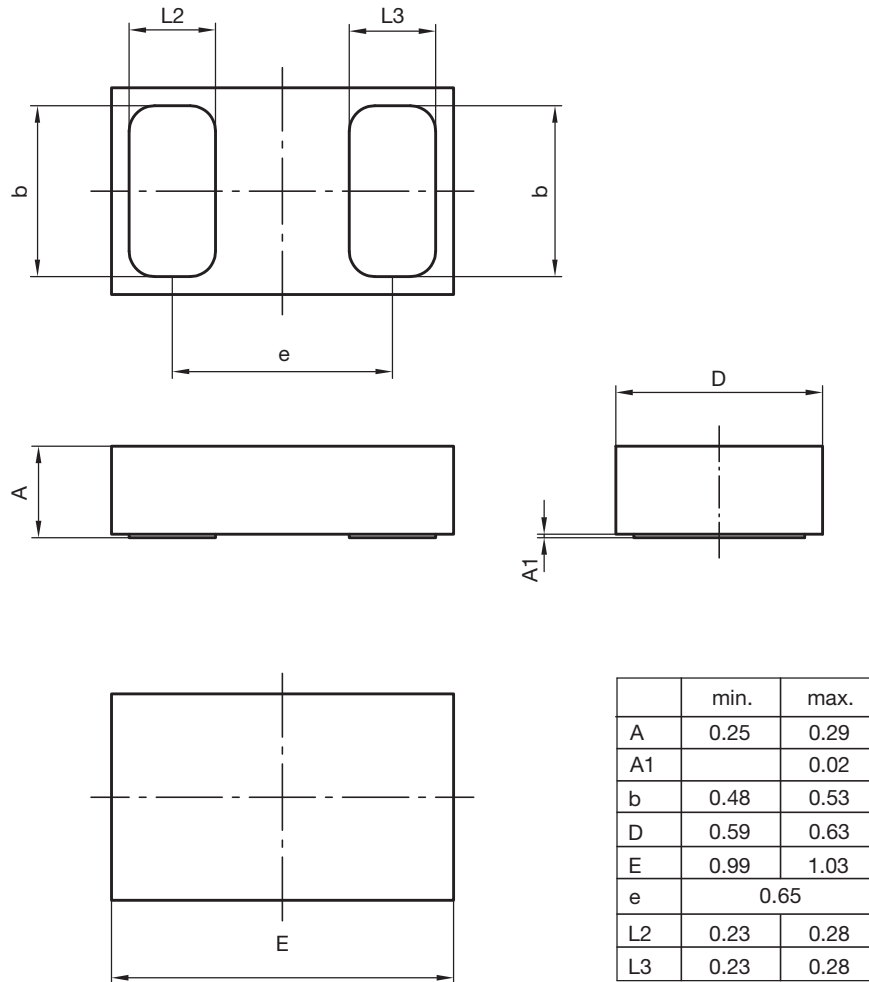


Fig. 4 - Typical Thermal Impedance vs. Time

PACKAGE DIMENSIONS in millimeters: **CLP1006-2L**



Document no.:S8-V-3906.04-039 (4)

Created - Date: 02. April 2015

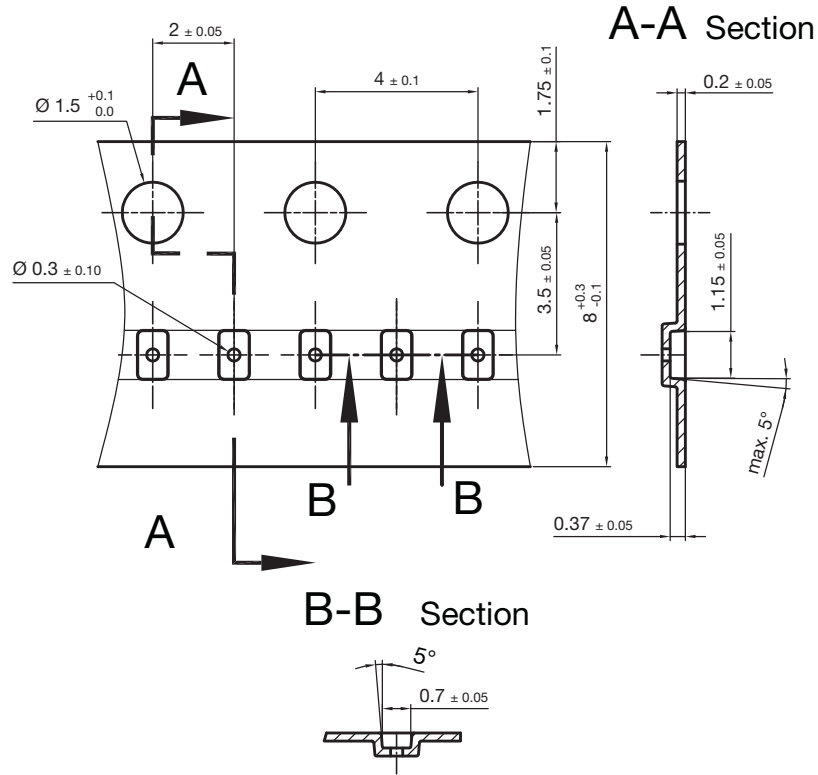
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Footprint and soldering recommendation:

please see Application Note: www.vishay.com/doc?85917



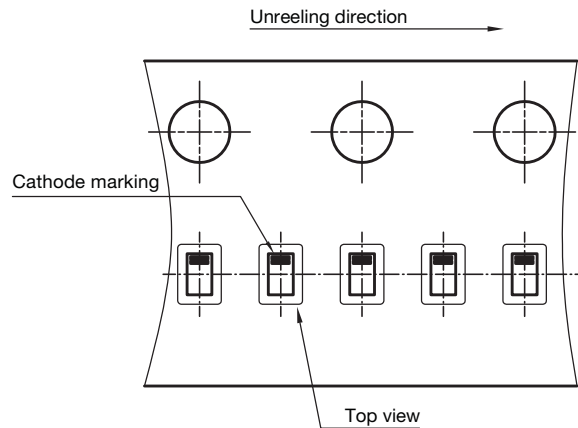
CARRIER TAPE in millimeters: **CLP1006-2L**



Cummulative tolerances of 10 sprocket holes is ± 0.2 mm

Carrier tape CLP1006-2L
S8-V-3906.04-051 (4)
03.02.2016
22937

ORIENTATION IN CARRIER CLP1006-2L



Orientation in Carrier CLP1006-2L (VSKY)
S8-V-3906.04-052 (4)
03.02.2016
22938



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