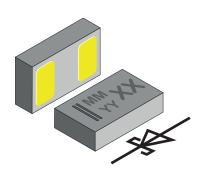


Schottky Rectifier Surface-Mount FlipKY® Gen 2



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. 400 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 |
| VSKY05201006 | VSKY05201006-G4-08 | Single | CLP1006-2L | 2A | 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} | 20 | V |
| Maximum average forward rectified current | | I _{F(AV)} | 0.5 | Α |
| Surge forward current | 8.3 ms half sine-wave | I _{FSM} | 12 | Α |
| 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 | | Tj | 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 |
| Lookogo gurrent | V _R = 10 V | I _R | - | 15 | μA |
| Leakage current | V _R = 20 V | I _R | - | 75 | μA |
| Forward voltage | I _F = 100 mA | V_{F} | 0.335 | 0.345 | V |
| Forward voltage | I _F = 0.5 A | V _F | 0.400 | 0.430 | V |
| Diode capacitance | V _R = 0 V, f = 1 MHz | C _D | 150 | - | pF |

RATINGS AND CHARACTERISTICS CURVES (T_A = 25 °C unless otherwise noted)

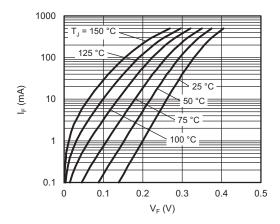


Fig. 1 - Typical Forward Current vs. Forward Voltage

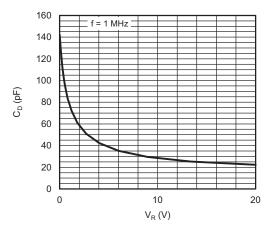


Fig. 3 - Typical Capacitance vs. Reverse Voltage

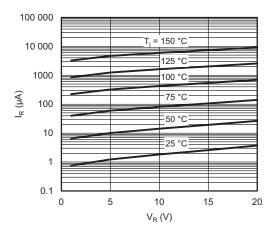


Fig. 2 - Typical Reverse Leakage Current vs. Reverse Voltage

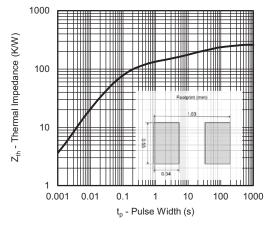
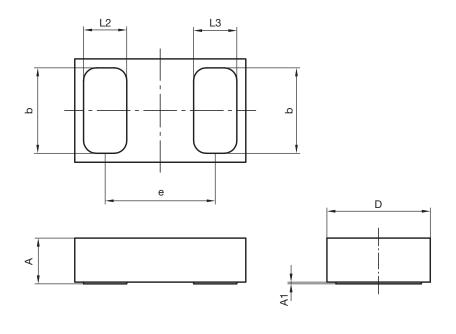
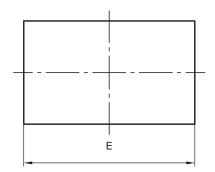


Fig. 4 - Typical Thermal Impedance vs. Time

PACKAGE DIMENSIONS in millimeters: CLP1006-2L





| | min. | max. | |
|----|------|------|--|
| Α | 0.25 | 0.29 | |
| A1 | | 0.02 | |
| b | 0.48 | 0.53 | |
| D | 0.59 | 0.63 | |
| Е | 0.99 | 1.03 | |
| е | 0.65 | | |
| L2 | 0.23 | 0.28 | |
| L3 | 0.23 | 0.28 | |

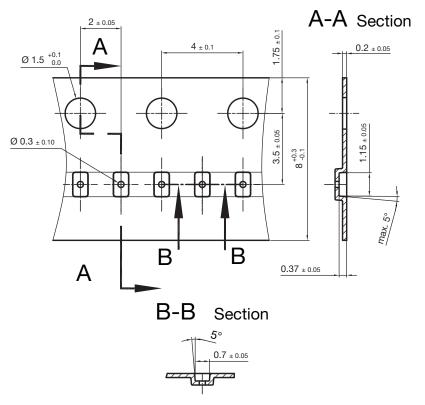
Document no.:S8-V-3906.04-039 (4) Created - Date: 02. April 2015

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Footprint and soldering recommendation:

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

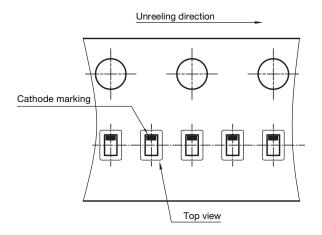
CARRIER TAPE in millimeters: **CLP1006-2L**



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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