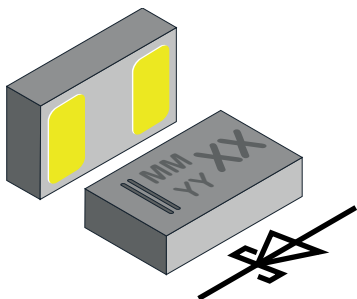


Schottky Rectifier Surface Mount FlipKY® Gen 2



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)

MECHANICAL DATA

Case: CLP1006-2L (VSKY)

Int. construction: single

PARTS TABLE

PART	ORDERING CODE	INTERNAL CONSTRUCTION	PACKAGE NAME	TYPE CODE	WEIGHT	TAPED UNITS PER REEL (8 mm TAPE ON 7" REEL)	MINIMUM ORDER QUANTITY
VSKY05401006	VSKY05401006-G4-08	Single diode	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

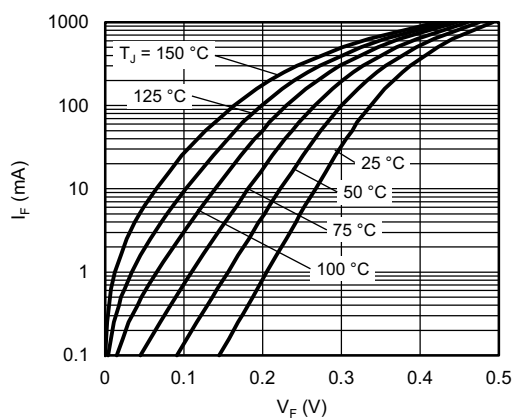
RATINGS AND CHARACTERISTICS CURVES ($T_A = 25\text{ }^{\circ}\text{C}$ unless otherwise noted)


Fig. 1 - Typical Forward Current vs. Forward Voltage

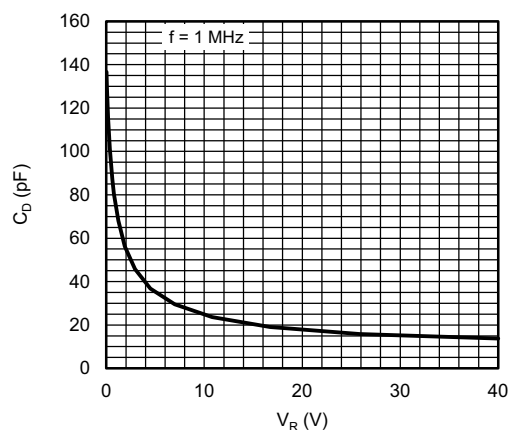


Fig. 3 - Typical Capacitance vs. Reverse Voltage

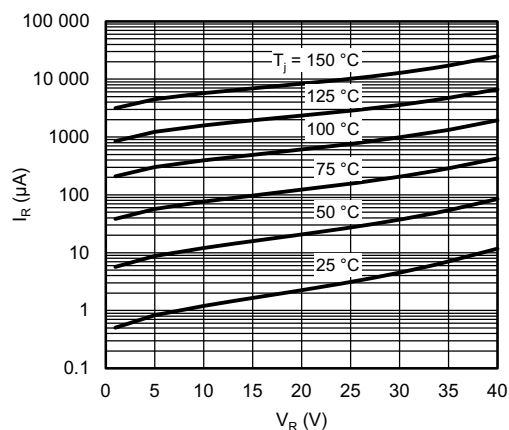


Fig. 2 - Typical Reverse Leakage Current vs. Reverse Voltage

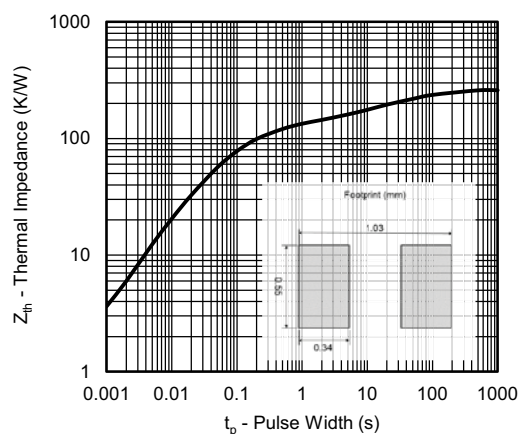
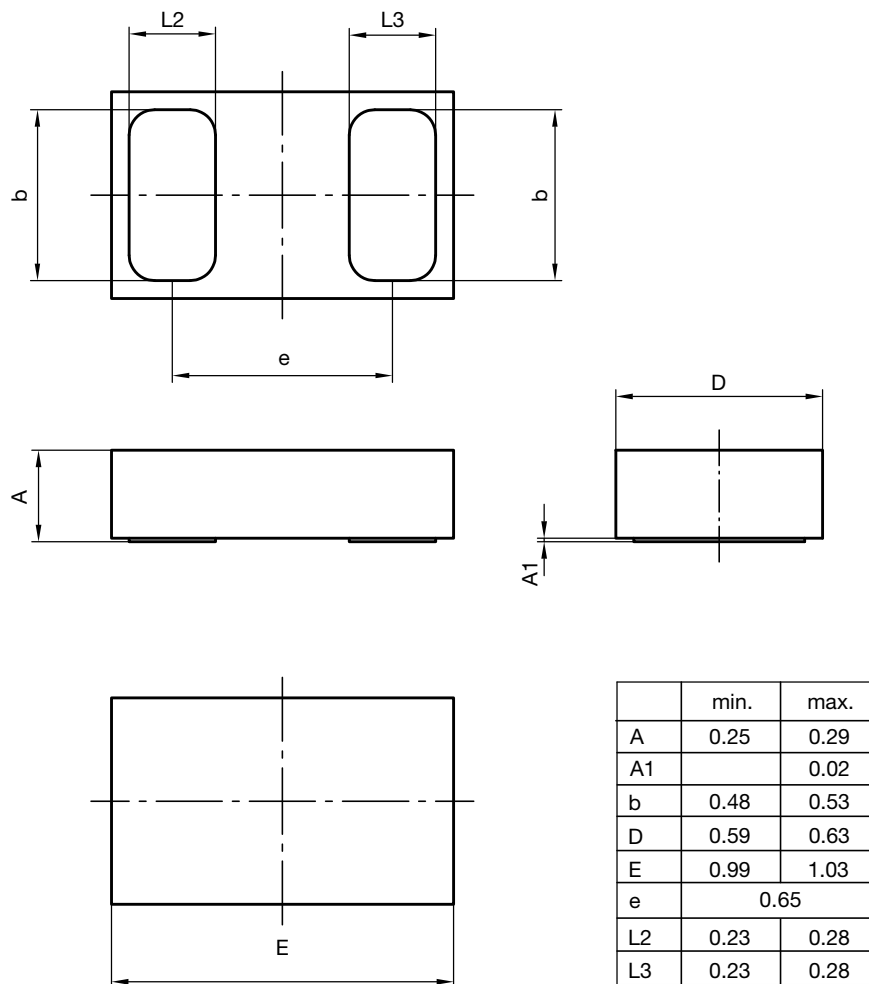


Fig. 4 - Typical Thermal Impedance vs. Time

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


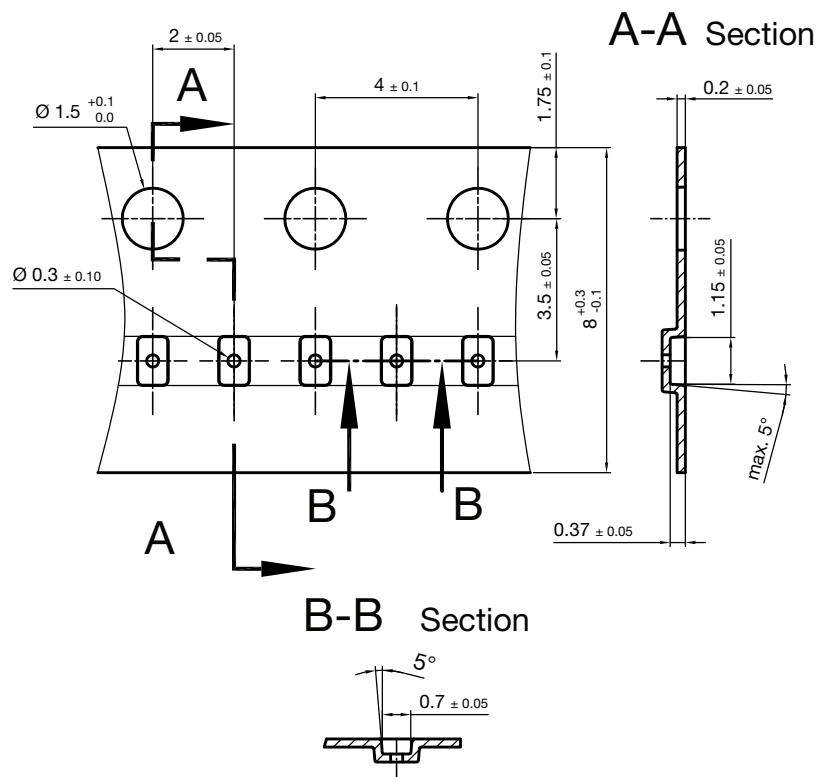
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Created - Date: 02. April 2015

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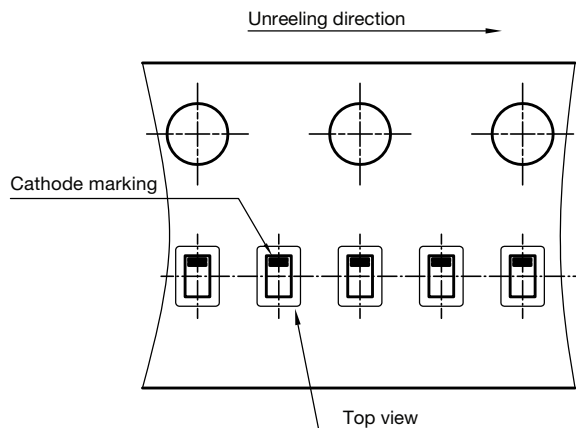
Footprint and soldering recommendation:

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 (VS KY)
S8-V-3906.04-052 (4)
03.02.2016
22938



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