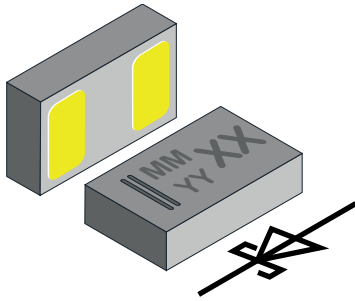


Schottky Rectifier Surface Mount FlipKY® Gen 2



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. 405 mV at 0.5 A)
- Low reverse current (< 15 μ A 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
VSKY05301006	VSKY05301006-G4-08	Single diode	CLP1006-2L	3A	0.400 mg	10 000	10 000

ABSOLUTE MAXIMUM RATINGS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)					
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT	
Maximum repetitive reverse voltage		V_{RRM}	30	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 ($T_{amb} = 25\text{ }^{\circ}\text{C}$, 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	$^{\circ}\text{C}$	
Storage temperature range		T_{stg}	-65 to +150	$^{\circ}\text{C}$	

ELECTRICAL CHARACTERISTICS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)						
PARAMETER	TEST CONDITION	SYMBOL	TYP.	MAX.	UNIT	
Leakage current	$V_R = 10\text{ V}$	I_R	-	15	μA	
	$V_R = 30\text{ V}$	I_R	-	75	μA	
Forward voltage	$I_F = 100\text{ mA}$	V_F	0.335	0.360	V	
	$I_F = 0.5\text{ A}$	V_F	0.405	0.430	V	
Diode capacitance	$V_R = 0\text{ V}$, $f = 1\text{ MHz}$	C_D	140	-	pF	

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

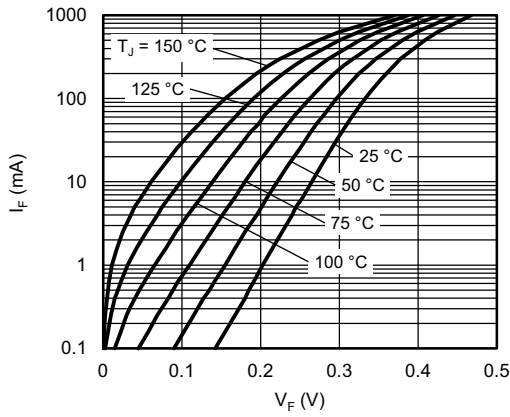


Fig. 1 - Typical Forward Current vs. Forward Voltage

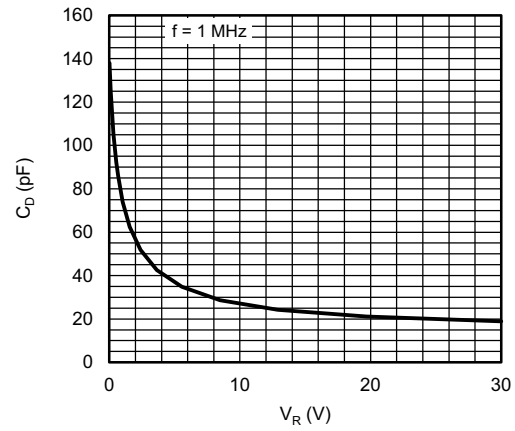


Fig. 3 - Typical Capacitance vs. Reverse Voltage

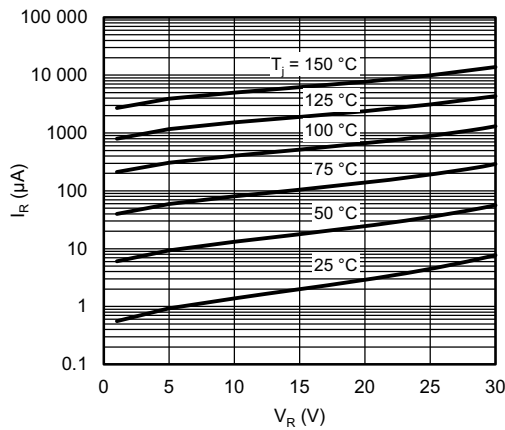


Fig. 2 - Typical Reverse Leakage Current vs. Reverse Voltage

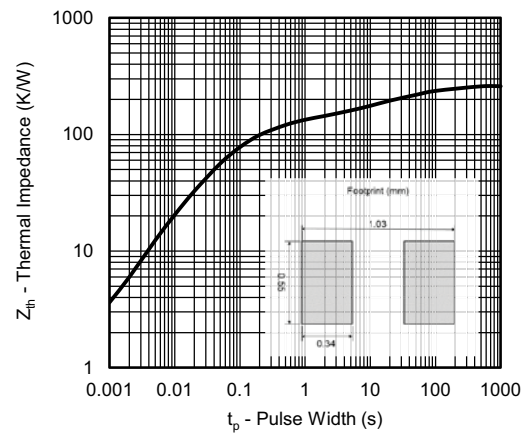
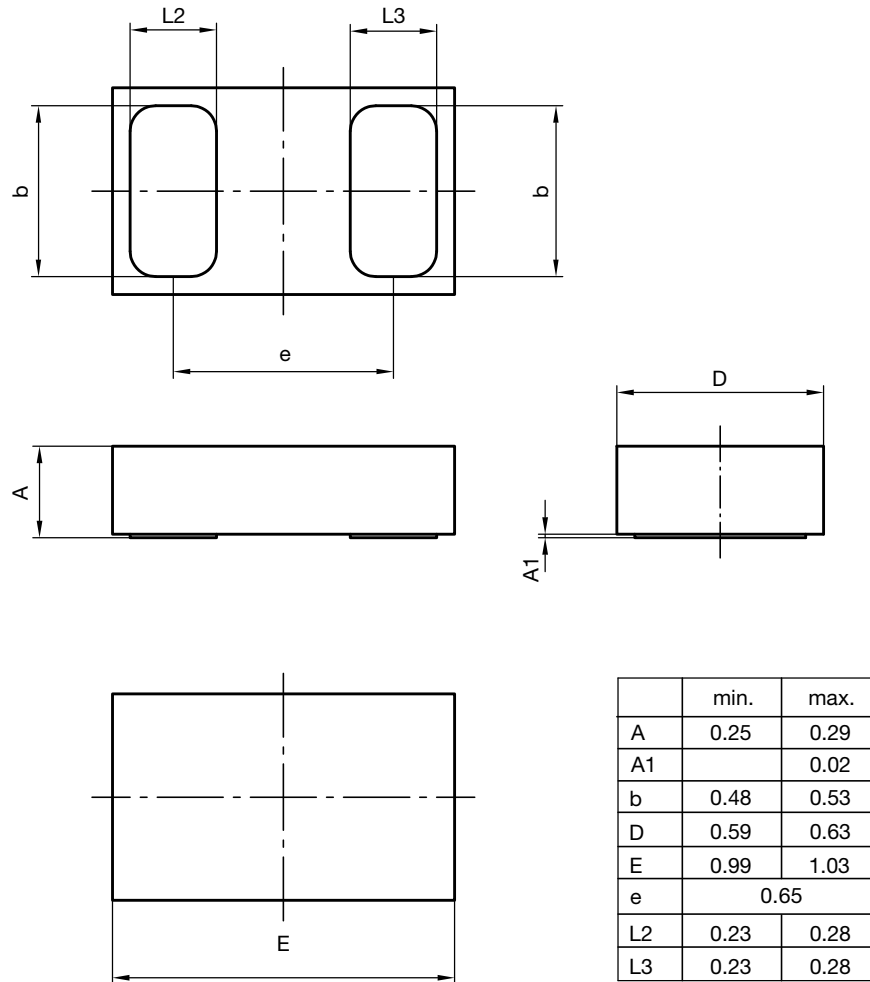


Fig. 4 - Typical Thermal Impedance vs. Time

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



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

Created - Date: 02. April 2015

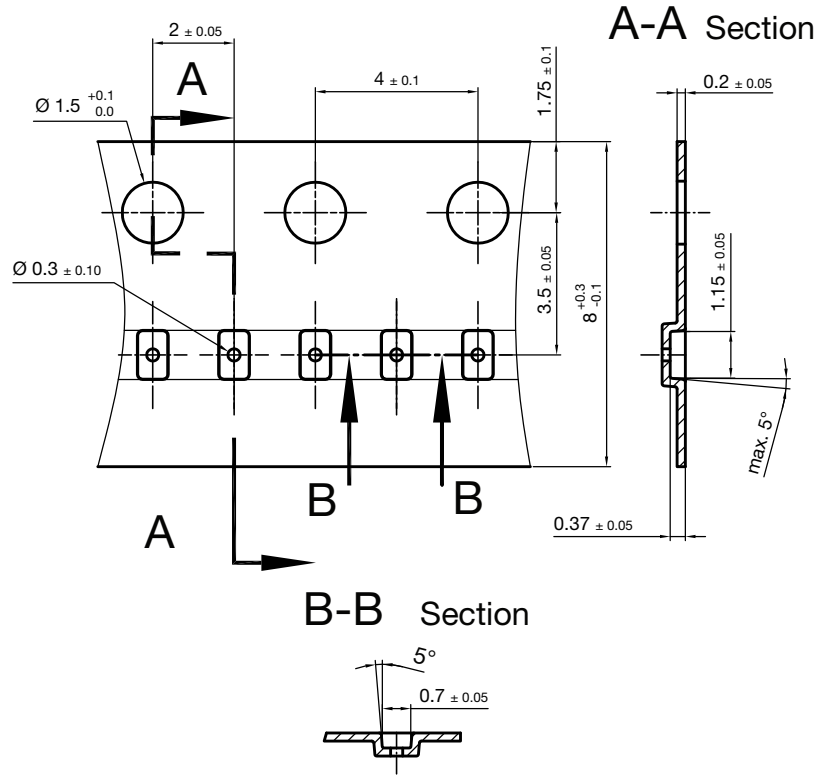
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Footprint and soldering recommendation:

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



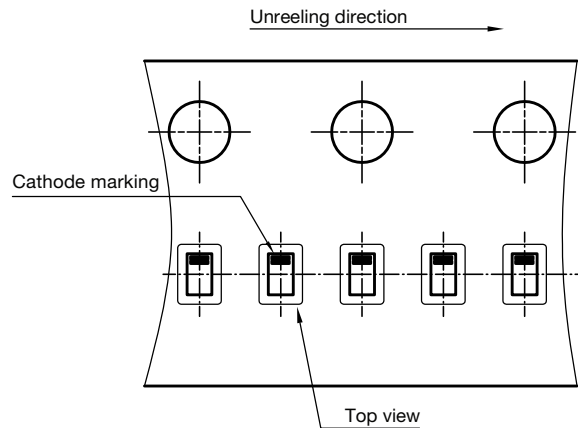
CARRIER TAPE in millimeters: **CLP1006-2L**



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)
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03.02.2016
22938



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