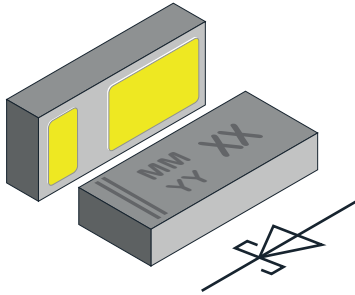


## Schottky Rectifier Surface-Mount Flipky® Gen 2



### FEATURES

- Schottky diode for high-speed switching
- Very low dimensions:  
1.4 mm x 0.6 mm x 0.29 mm
- 1 A forward current
- Low forward voltage drop (typ. 465 mV at 1 A)
- Low reverse current (< 20  $\mu$ A at 10 V)
- Material categorization:  
for definitions of compliance please see [www.vishay.com/doc?99912](http://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
VSKY10401406	VSKY10401406-G4-08	Single	CLP1406-2L	54	0.570 mg	5000	5000

ABSOLUTE MAXIMUM RATINGS ( $T_{amb} = 25\text{ }^{\circ}\text{C}$ , unless otherwise specified)				
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Maximum repetitive reverse voltage		$V_{RRM}$	40	V
Maximum average forward rectified current		$I_{F(AV)}$	1	A
Surge forward current	8.3 ms half sine-wave	$I_{FSM}$	18	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	$V_R = 10\text{ V}$	$I_R$	-	20	$\mu\text{A}$
	$V_R = 40\text{ V}$	$I_R$	-	100	$\mu\text{A}$
Forward voltage	$I_F = 0.5\text{ A}$	$V_F$	0.395	0.420	V
	$I_F = 1\text{ A}$	$V_F$	0.465	0.490	V
Diode capacitance	$V_R = 0\text{ V}$ , $f = 1\text{ MHz}$	$C_D$	225	-	pF

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

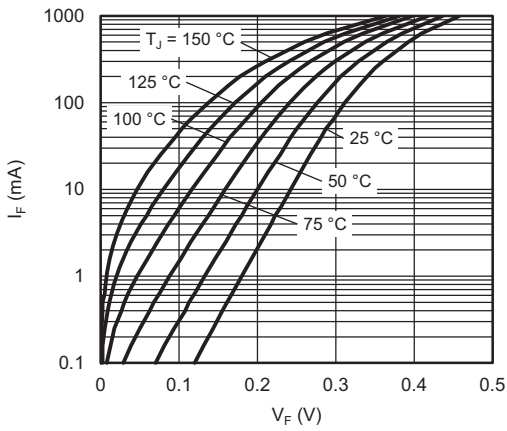


Fig. 1 - Typical Forward Current vs. Forward Voltage

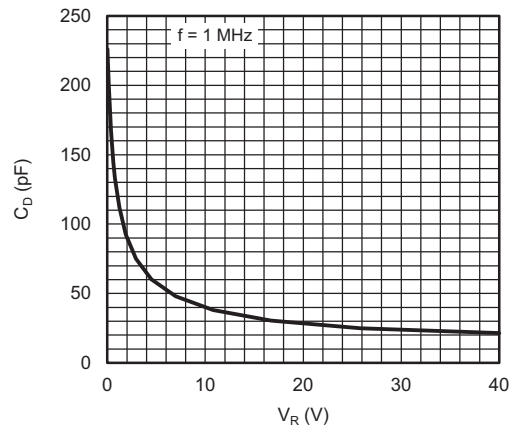


Fig. 3 - Typical Capacitance vs. Reverse Voltage

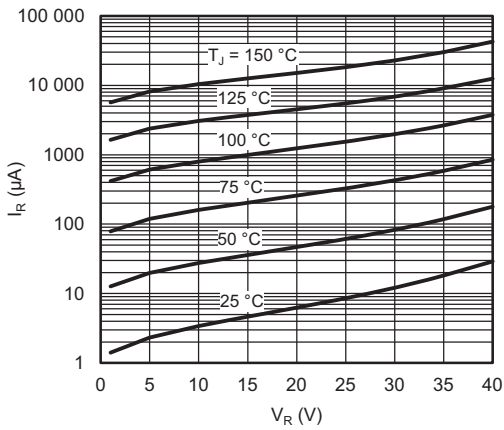


Fig. 2 - Typical Reverse Leakage Current vs. Reverse Voltage

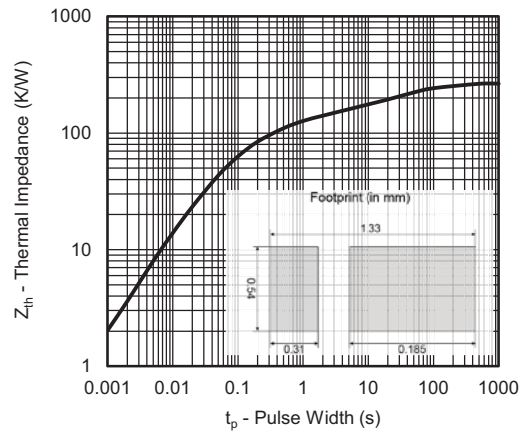
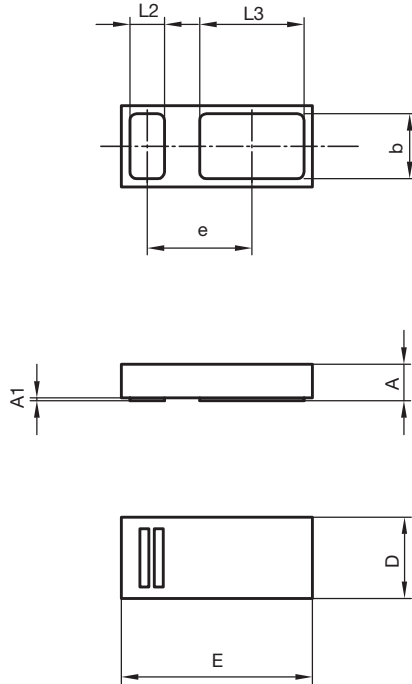


Fig. 4 - Typical Thermal Impedance vs. Time



PACKAGE DIMENSIONS in millimeters: **CLP1406-2L**

Package = Chip Dimensions in mm



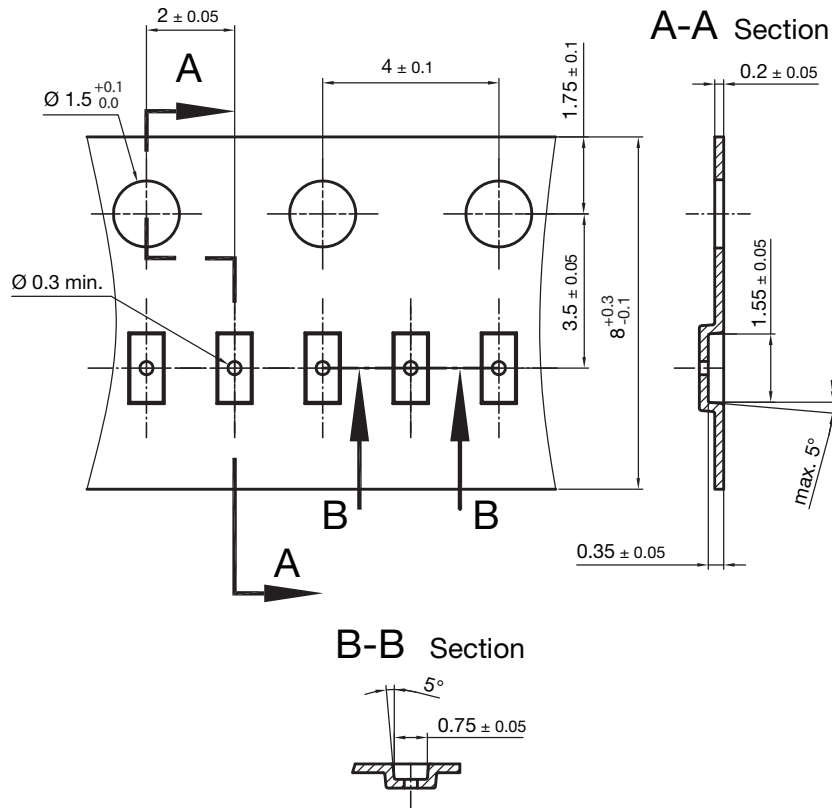
	min.	max.
A	0.25	0.29
A1		0.02
b	0.46	0.50
D	0.59	0.63
E	1.39	1.43
e	0.77	
L2	0.23	0.27
L3	0.75	0.79

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**Footprint and soldering recommendation:**  
please see Application Note: [www.vishay.com/doc?85917](http://www.vishay.com/doc?85917)



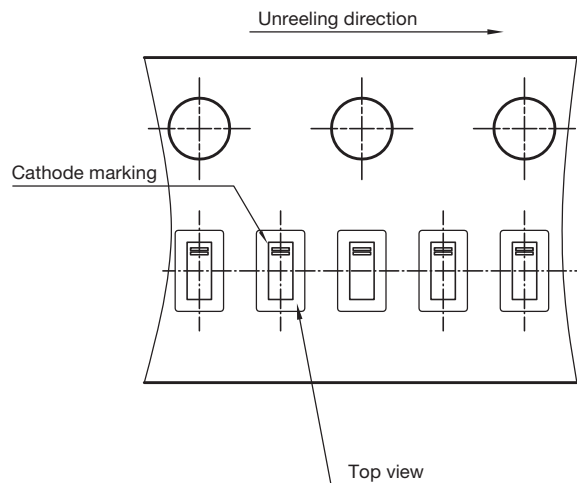
**CARRIER TAPE** in millimeters: **CLP1406-2L**



Cummulative tolerances of 10 sprocket holes is +/-0.2mm

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Created - Date: 22. Jan. 2016  
22879

**ORIENTATION IN CARRIER CLP1406-2L**



Document no. S8-V-3906.04-047 (4)  
Created - Date: 25. Jan. 2016  
22880



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