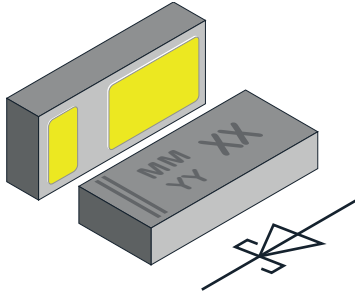


## Schottky Rectifier Surface-Mount Flipky® Gen 2



### 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. 440 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

[click logo to get started](#)

**3D**  
Models  
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
VSKY10301406	VSKY10301406-G4-08	Single	CLP1406-2L	53	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		$V_{RRM}$	30	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	$\mu\text{A}$
	$V_R = 30\text{ V}$	$I_R$	-	100	$\mu\text{A}$
Forward voltage	$I_F = 0.5\text{ A}$	$V_F$	0.380	0.420	V
	$I_F = 1\text{ A}$	$V_F$	0.440	0.470	V
Diode capacitance	$V_R = 0\text{ V}$ , $f = 1\text{ MHz}$	$C_D$	230	-	pF



RATINGS AND CHARACTERISTICS CURVES (T<sub>A</sub> = 25 °C unless otherwise noted)

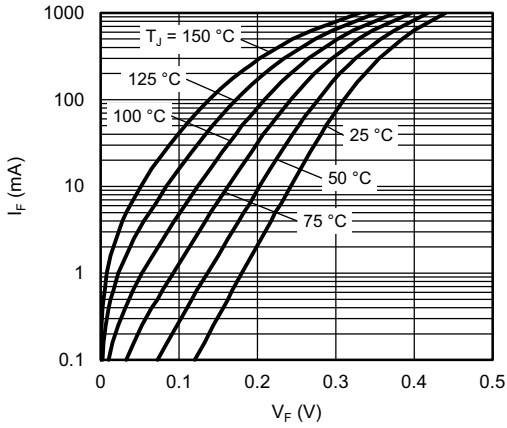


Fig. 1 - Typical Forward Current vs. Forward Voltage

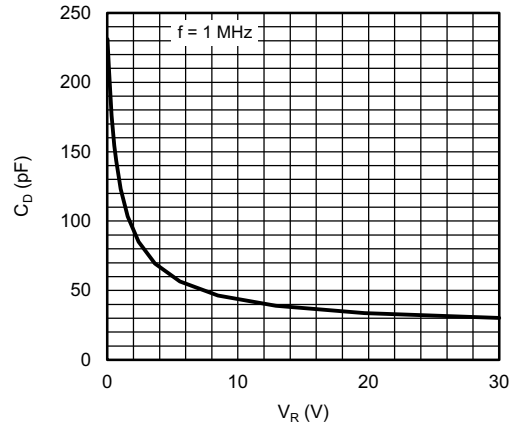


Fig. 3 - Typical Capacitance vs. Reverse Voltage

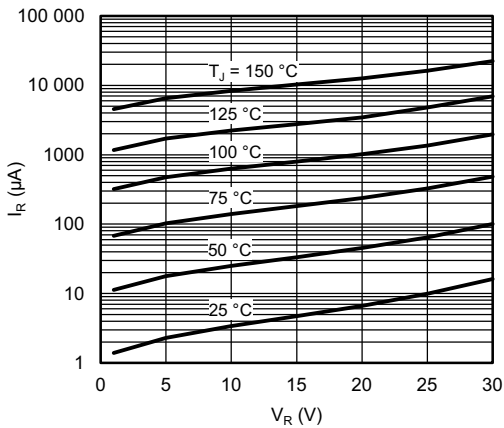


Fig. 2 - Typical Reverse Leakage Current vs. Reverse Voltage

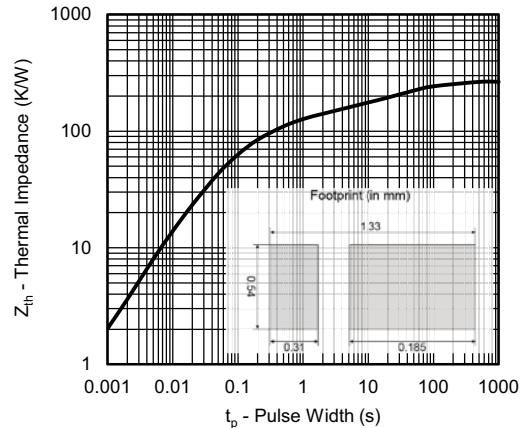
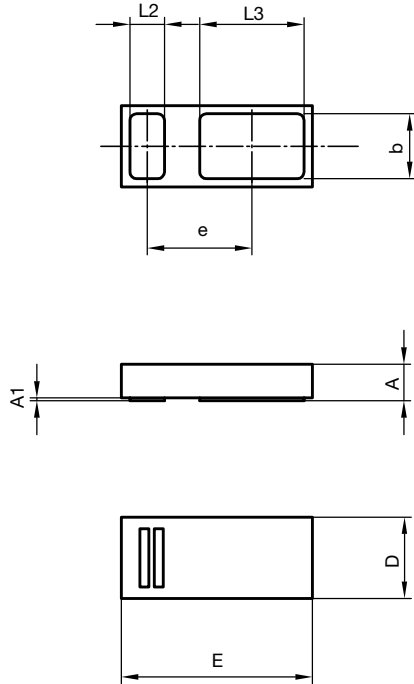


Fig. 4 - Typical Thermal Impedance vs. Time



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

Package = Chip Dimensions in mm



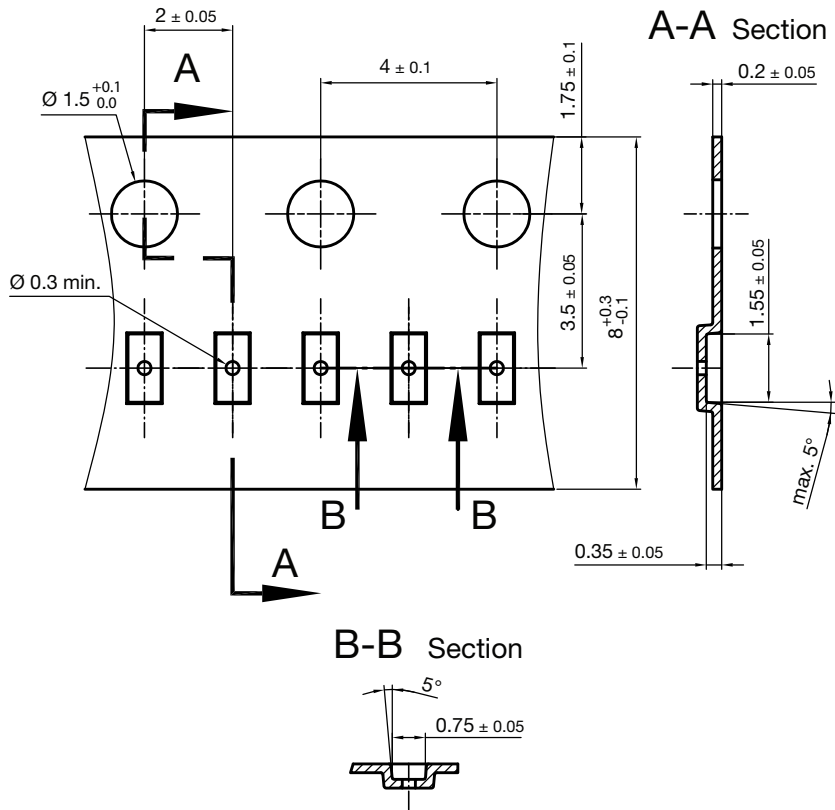
	min.	max.
A	0.25	0.29
A1		0.02
b	0.46	0.50
D	0.59	0.63
E	1.39	1.43
e	0.77	
L2	0.23	0.27
L3	0.75	0.79

Document no.:S8-V-3906.04-045 (4)  
Created - Date: 22. Jan. 2016  
22878

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



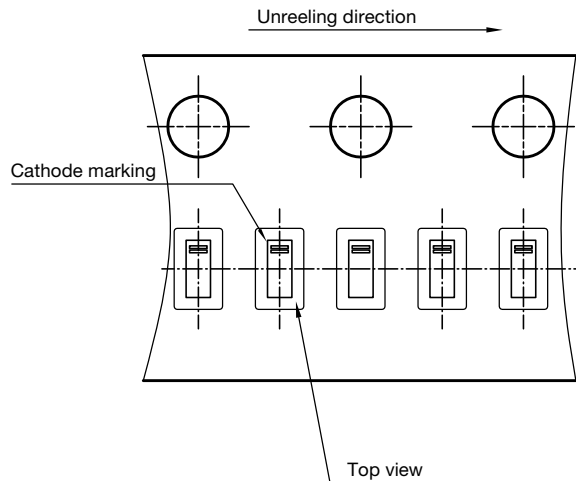
**CARRIER TAPE** in millimeters: **CLP1406-2L**



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

Document no. S8-V-3906.04-046 (4)  
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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