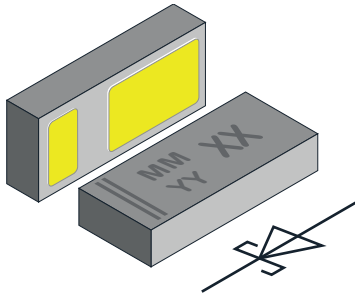


Schottky Rectifier Surface Mount Flipky® Gen 2



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. 425 mV at 1 A)
- Low reverse current (< 20 μ A at 10 V)
- Material categorization:
for definitions of compliance please see www.vishay.com/doc?99912



MECHANICAL DATA

Case: CLP1406-2L (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
VSKY10201406	VSKY10201406-G4-08	Single diode	CLP1406-2L	52	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}	20	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	μA
	$V_R = 20\text{ V}$	I_R		100	μA
Forward voltage	$I_F = 0.5\text{ A}$	V_F	0.375	0.400	V
	$I_F = 1\text{ A}$	V_F	0.425	0.450	V
Diode capacitance	$V_R = 0\text{ V}$, $f = 1\text{ MHz}$	C_D	240		pF

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

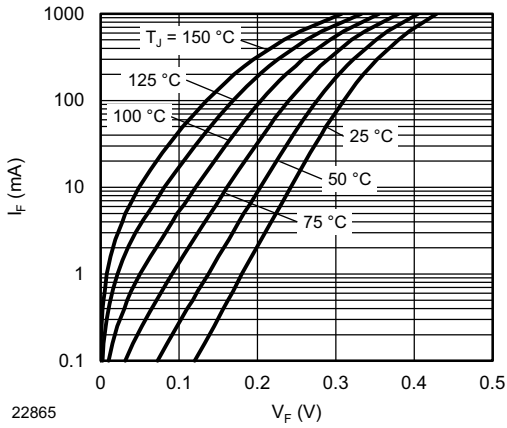


Fig. 1 - Typical Forward Current vs. Forward Voltage

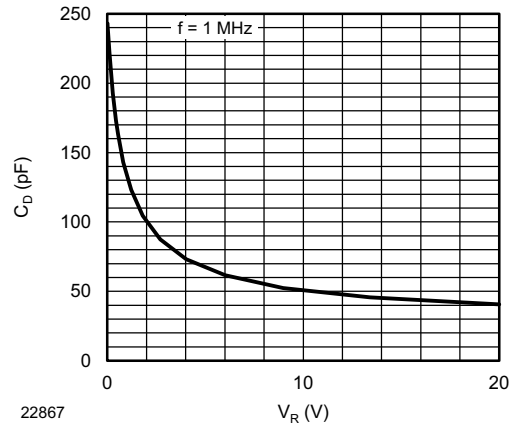


Fig. 3 - Typical Capacitance vs. Reverse Voltage

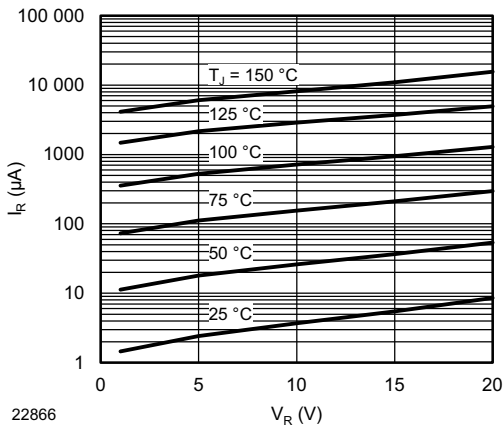


Fig. 2 - Typical Reverse Leakage Current vs. Reverse Voltage

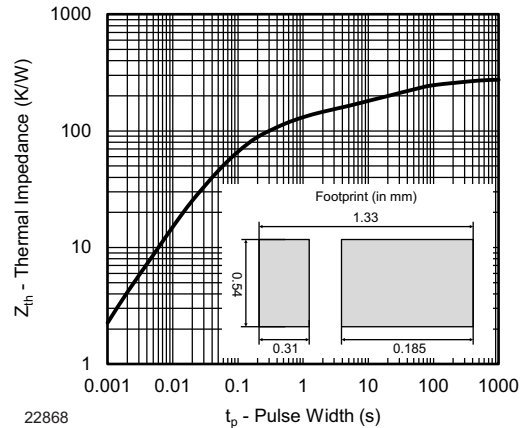
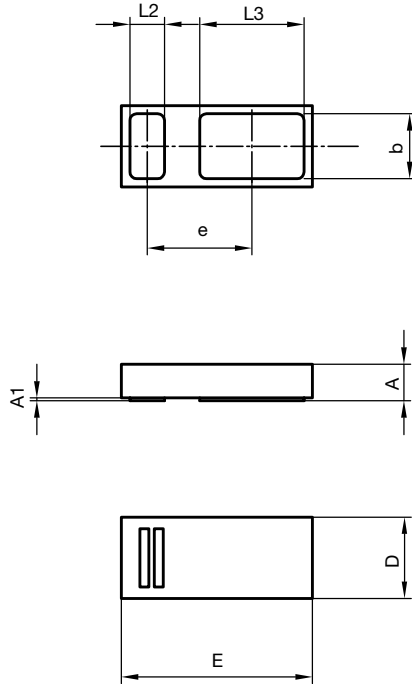


Fig. 4 - Typical Thermal Impedance



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

Package = Chip Dimensions in mm



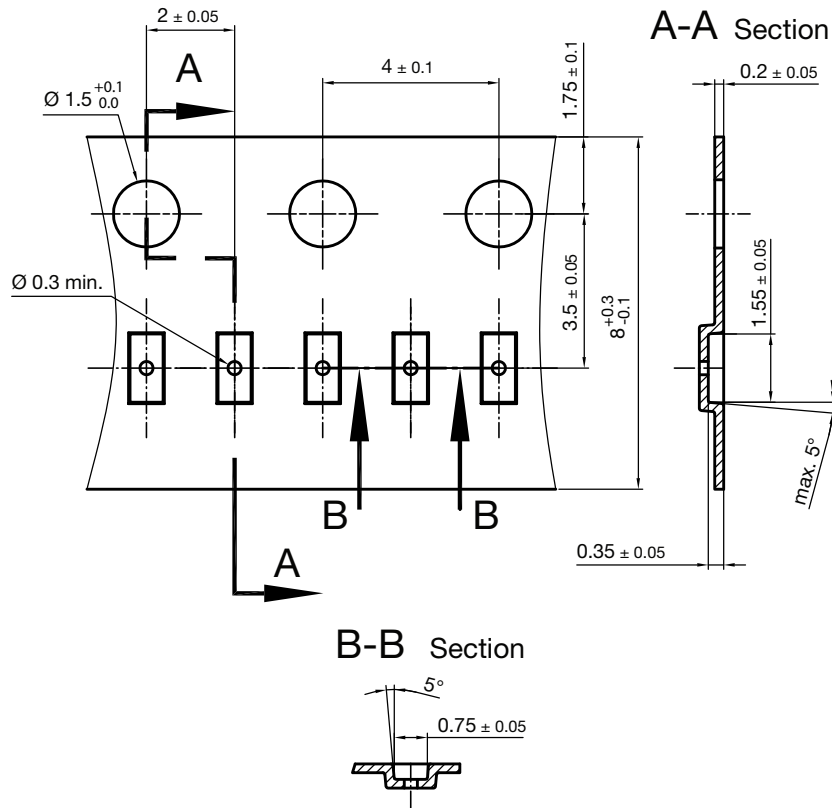
	min.	max.
A	0.25	0.29
A1		0.02
b	0.46	0.50
D	0.59	0.63
E	1.39	1.43
e	0.77	
L2	0.23	0.27
L3	0.75	0.79

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22878

Footprint and soldering recommendation:
please see Application Note: www.vishay.com/doc?85917



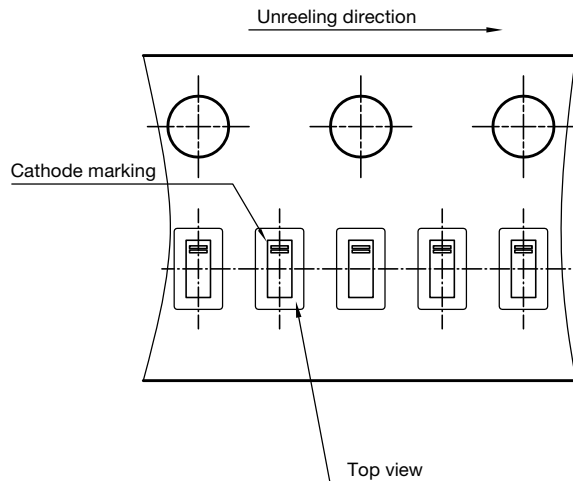
CARRIER TAPE in millimeters: **CLP1406-2L**



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

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22879

ORIENTATION IN CARRIER CLP1406-2L



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



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