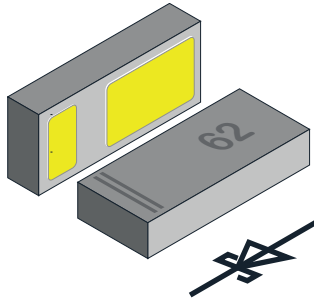


Schottky Rectifier Surface-Mount FlipKY® Gen 3



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 1000 mA)
- Low reverse current (< 15 µA at 10 V)
- AEC-Q101 qualified
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

 AUTOMOTIVE
GRADE

RoHS
COMPLIANT
HALOGEN
FREE
GREEN
(5-2008)

LINKS TO ADDITIONAL RESOURCES



PARTS TABLE								
PART	GRADE	ORDERING CODE	CIRCUIT CONFIGURATION	PACKAGE NAME	TYPE MARKING	WEIGHT	TAPED UNITS PER REEL (8 mm TAPE ON 7" REEL)	MINIMUM ORDER QUANTITY
VSKY1020E6	AEC-Q101	VSKY1020E6HG4-08	Single	CLP1406-2L	62	0.57 mg	5000	5000

ABSOLUTE MAXIMUM RATINGS (T _{amb} = 25 °C, unless otherwise specified)				
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Reverse voltage		V _R	20	V
Forward continuous current		I _F	1000	mA
Surge forward current	Single pulse; 8.3 ms half sine-wave	I _{FSM}	18	A

THERMAL CHARACTERISTICS (T _{amb} = 25 °C, unless otherwise specified)				
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Thermal resistance junction to soldering point	Acc. JEDEC® JESD51-14	R _{thjS}	8	K/W
Maximum operating junction temperature		T _{j max.}	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
Leakage current	V _R = 20 V	I _R	-	60	µA
Forward voltage	I _R = 10 mA	V _F	314	368	mV
Forward voltage	I _R = 500 mA	V _F	375	434	mV
Forward voltage	I _R = 1000 mA	V _F	425	493	mV
Diode capacitance	V _R = 0 V, f = 1 MHz	C _D	240	-	pF

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

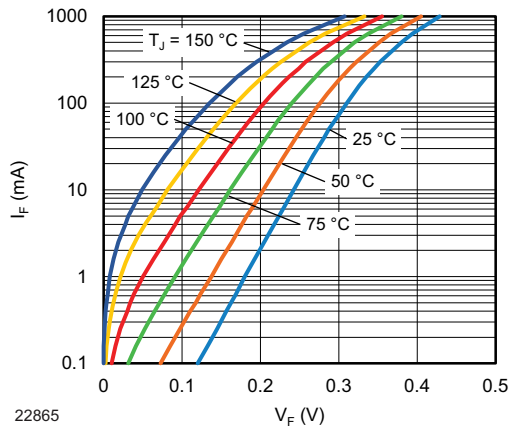


Fig. 1 - Typical Forward Current vs. Forward Voltage

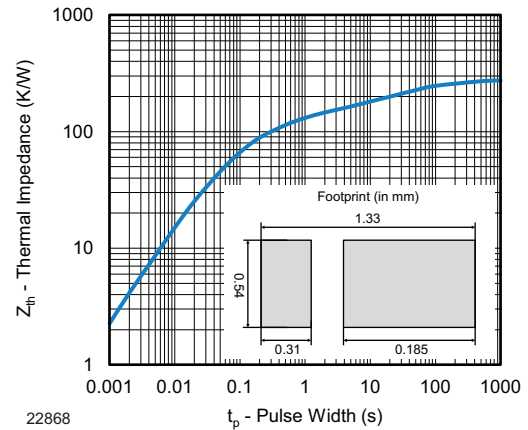


Fig. 4 - Typical Thermal Impedance

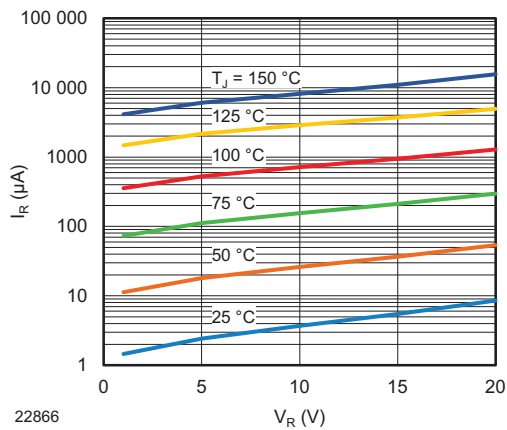


Fig. 2 - Typical Reverse Leakage Current vs. Reverse Voltage

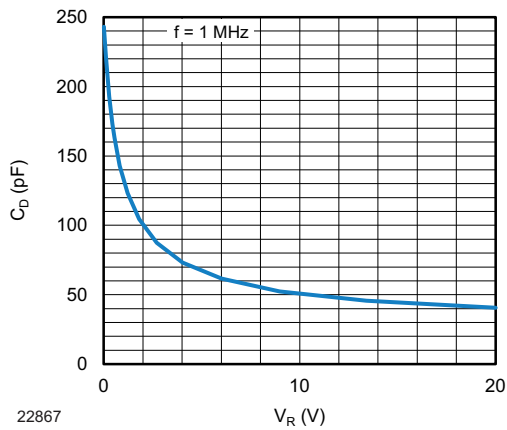
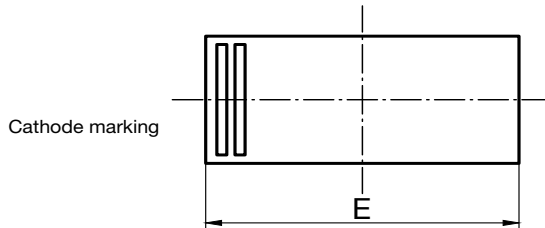
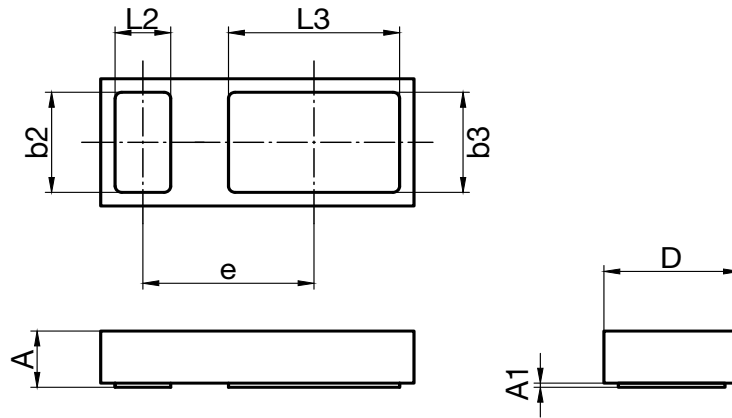


Fig. 3 - Typical Capacitance vs. Reverse Voltage



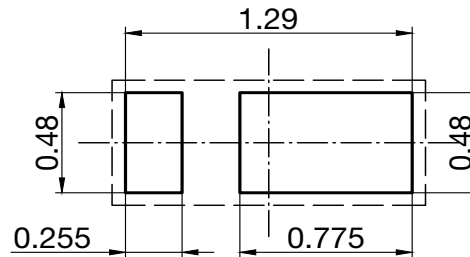
PACKAGE DIMENSIONS in millimeters: **CLP1406-2L**

Package = Chip Dimensions in mm



	min	max
A	0.25	0.29
A1		0.02
b2	0.46	0.50
b3	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

foot print recommendation:

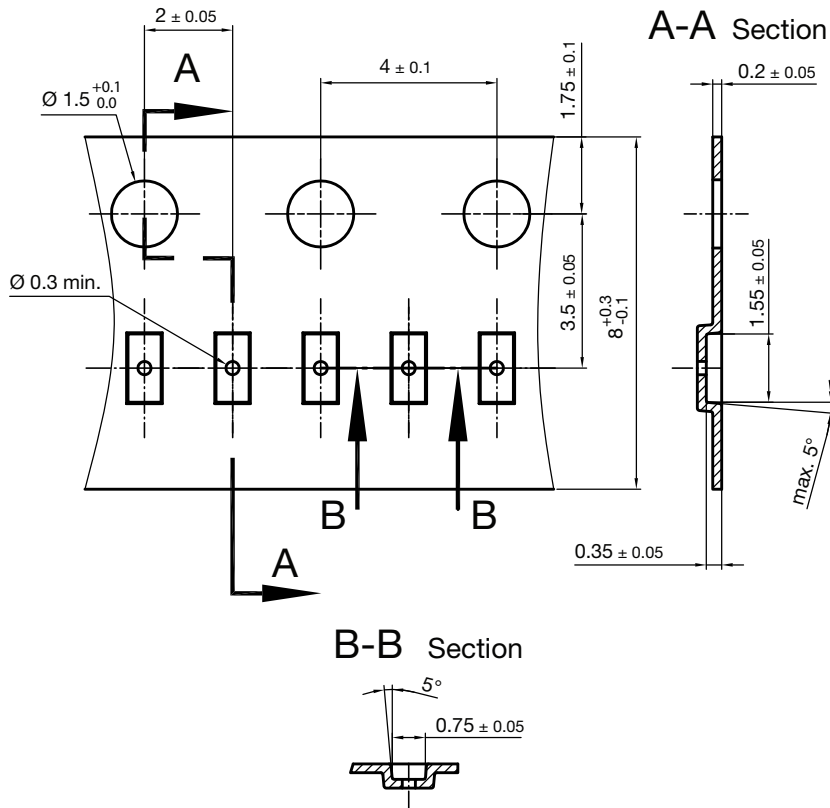


Document no.:S8-V-3906.04-045 (4)
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 Rev.1 - Date: 19. Dec. 2023
 23228

Footprint and soldering recommendation:

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

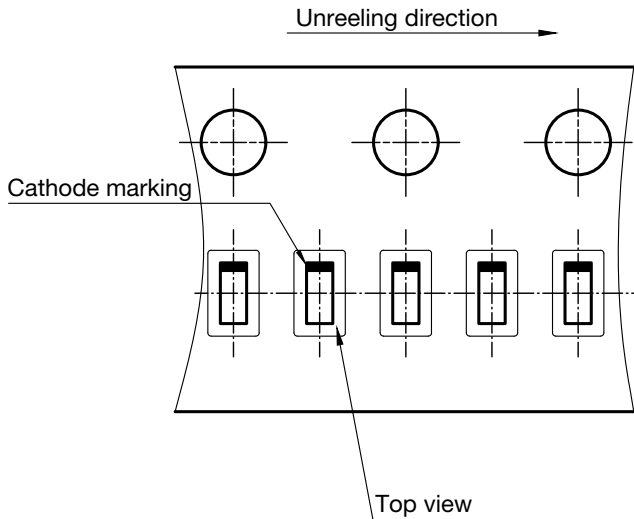
CARRIER TAPE in millimeters: **CLP1406-2L**



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

Document no. S8-V-3906.04-046 (4)
 Created - Date: 22. Jan. 2016
 22879

ORIENTATION IN CARRIER CLP1406-2



Document no. S8-V-3906.04-047 (4)
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