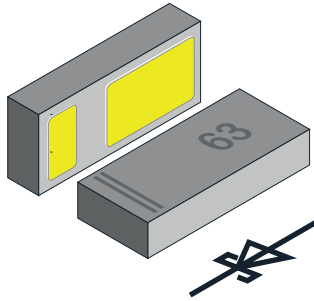


Schottky Rectifier Surface-Mount FlipKY® Gen 3



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. 440 mV at 1000 mA)
- Low reverse current (< 15 μ A 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
VSKY1030E6	AEC-Q101	VSKY1030E6HG4-08	Single	CLP1406-2L	63	0.57 mg	5000	5000

ABSOLUTE MAXIMUM RATINGS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)				
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Reverse voltage		V_R	30	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 ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)				
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Thermal resistance junction to soldering point	Acc. JEDEC® JESD51-41	R_{thJS}	8	K/W
Maximum operating junction temperature		$T_j \text{ max.}$	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
Leakage current	$V_R = 30\text{ V}$	I_R	-	60	μA
Forward voltage	$I_F = 100\text{ mA}$	V_F	316	367	mV
Forward voltage	$I_F = 500\text{ mA}$	V_F	380	432	mV
Forward voltage	$I_F = 1000\text{ mA}$	V_F	440	493	mV
Diode capacitance	$V_R = 0\text{ V}, f = 1\text{ MHz}$	C_D	230	-	pF

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

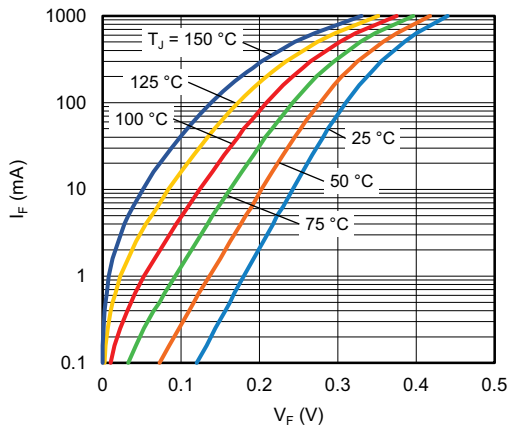


Fig. 1 - Typical Forward Current vs. Forward Voltage

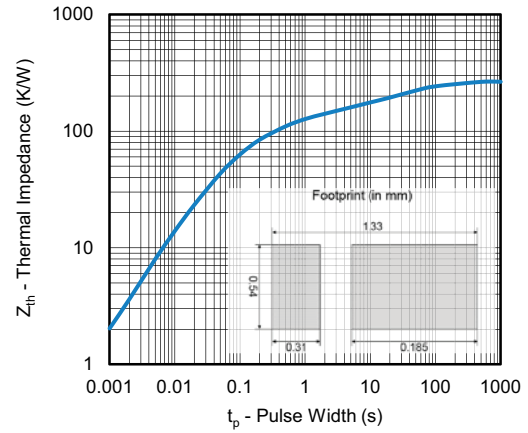


Fig. 4 - Typical Thermal Impedance vs. Time

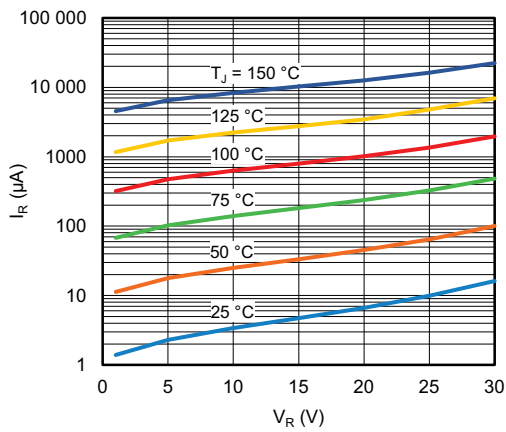


Fig. 2 - Typical Reverse Leakage Current vs. Reverse Voltage

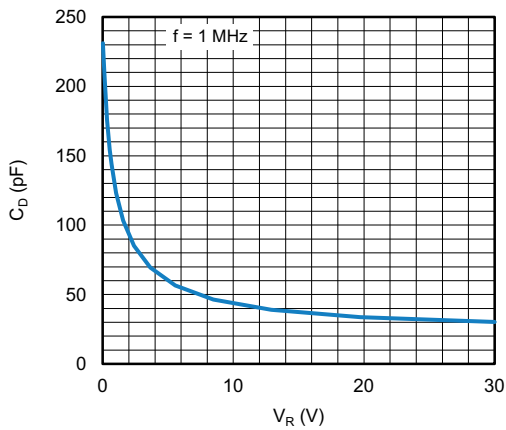
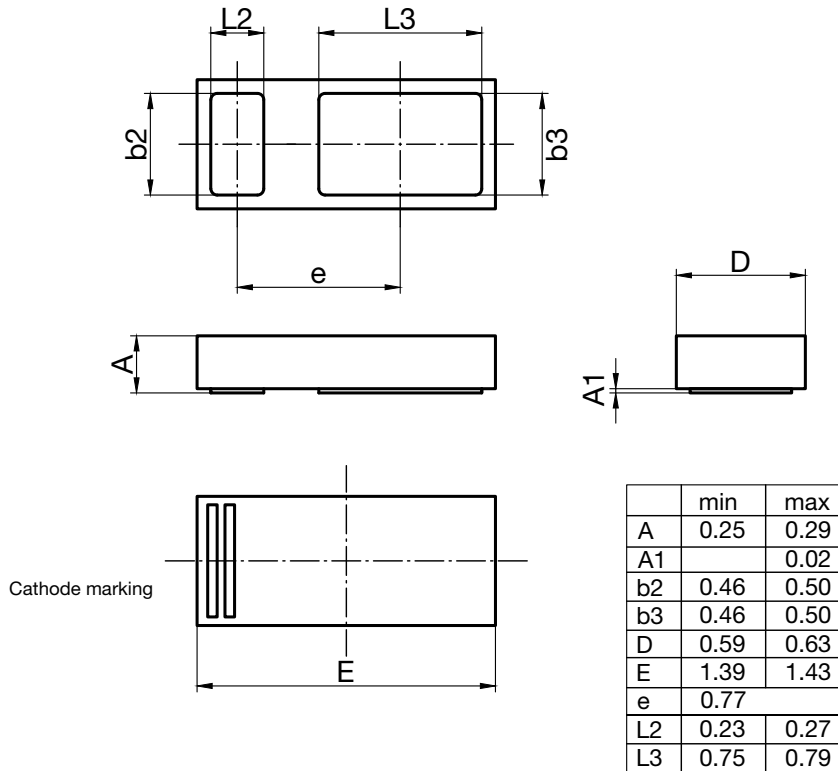


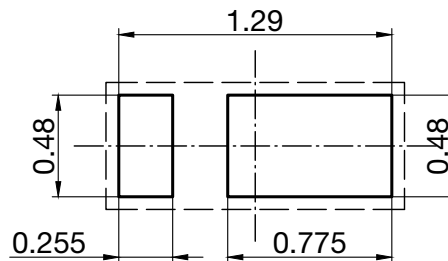
Fig. 3 - Typical Capacitance vs. Reverse Voltage

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

Package = Chip Dimensions in mm



foot print recommendation:



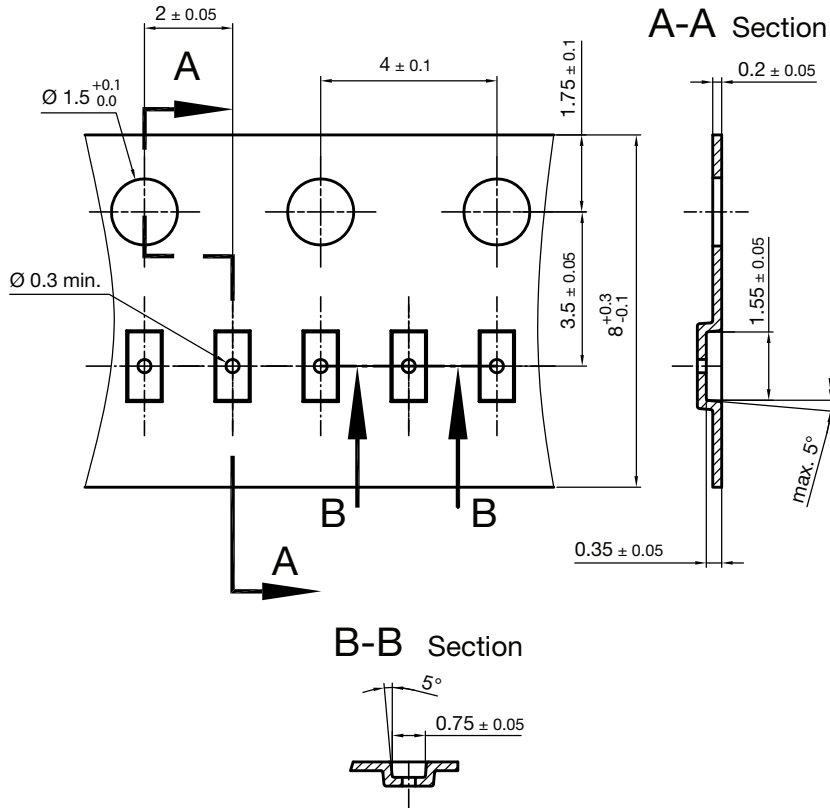
Document no.:S8-V-3906.04-045 (4)
 Created - Date: 22. Jan. 2016
 Rev.1 - Date: 19. Dec. 2023
 23228

Footprint and soldering recommendation:

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



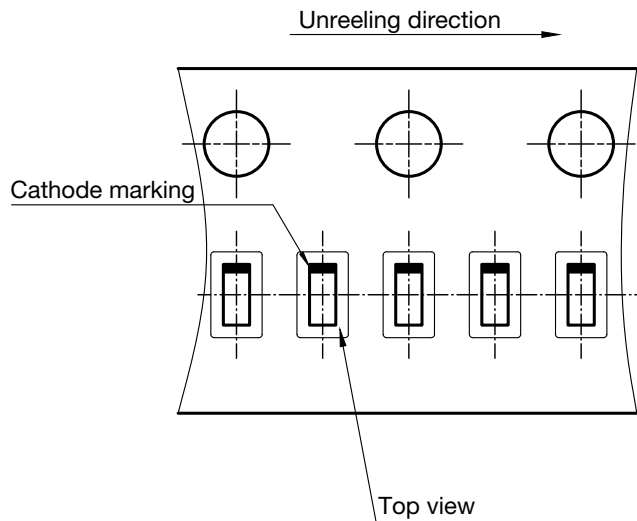
CARRIER TAPE in millimeters: **CLP1406-2L**



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 CLP1406-2L



Document no. S8-V-3906.04-047 (4)
Created - Date: 19.12.2023
22880



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