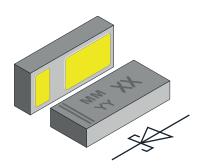


Schottky Rectifier Surface-Mount Flipky® Gen 2



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 µA at 10 V)
- Material categorization: for definitions of compliance please see <u>www.vishay.com/doc?99912</u>





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
VSKY10201406	VSKY10201406-G4-08	Single	CLP1406-2L	52	0.570 mg	5000	5000

ABSOLUTE MAXIMUM RATINGS (T _{amb} = 25 °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	Α	
Surge forward current	8.3 ms half sine-wave	I _{FSM}	18	А	
Power dissipation	Footprint acc. fig. 4	P _{tot}	450	mW	

THERMAL CHARACTERISTICS (T _{amb} = 25 °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		Tj	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
Lookago gurrant	V _R = 10 V	I _R		20	μΑ
Leakage current	V _R = 20 V	I _R		100	μΑ
	I _F = 0.5 A	V_{F}	0.375	0.400	V
Forward voltage	I _F = 1 A	V _F	0.425	0.450	V
Diode capacitance	V _R = 0 V, f = 1 MHz	C _D	240		pF

RATINGS AND CHARACTERISTICS CURVES (T_A = 25 °C unless otherwise noted)

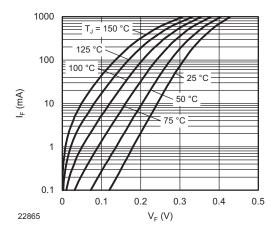
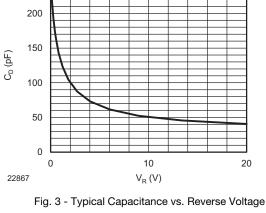


Fig. 1 - Typical Forward Current vs. Forward Voltage



250

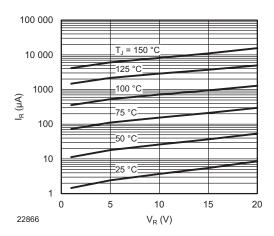


Fig. 2 - Typical Reverse Leakage Current vs. Reverse Voltage

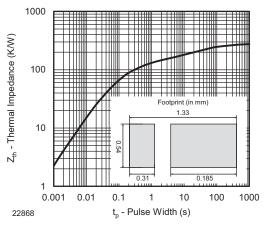
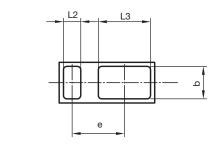


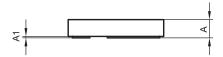
Fig. 4 - Typical Thermal Impedance



PACKAGE DIMENSIONS in millimeters: CLP1406-2L







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	E	

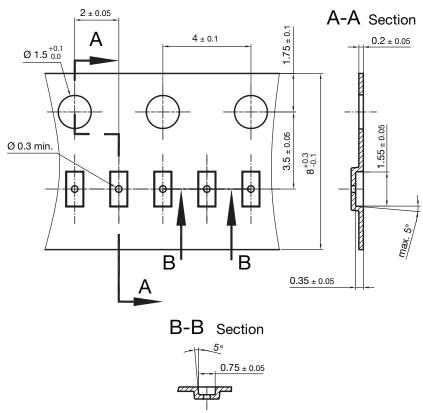
	min.	max.
Α	0.25	0.29
A1		0.02
b	0.46	0.50
D	0.59	0.63
Е	1.39	1.43
е	0.7	77
L2	0.23	0.27
L3	0.75	0.79

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Footprint and soldering recommendation:

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

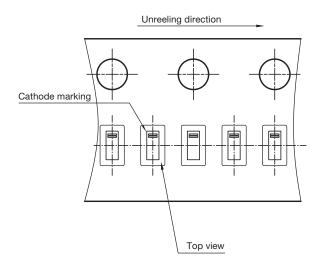
CARRIER TAPE in millimeters: **CLP1406-2L**



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

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ORIENTATION IN CARRIER CLP1406-2L



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