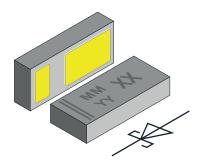
Vishay Semiconductors

Schottky Rectifier Surface-Mount Flipky[®] Gen 2



www.vishay.com

DESIGN SUPPORT TOOLS AVAILABLE

SHA



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 www.vishay.com/doc?99912





HALOGEN FREE

GREEN

(5-2008)

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	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 °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
aakaga aurrant	V _R = 10 V	I _R		20	μA
Leakage current	V _R = 20 V	I _R		100	μA
Forward voltage	I _F = 0.5 A	V _F	0.375	0.400	V
	I _F = 1 A	V _F	0.425	0.450	V
Diode capacitance	V _R = 0 V, f = 1 MHz	CD	240		pF

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Document Number: 85931



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

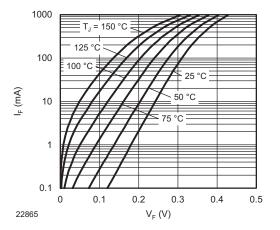


Fig. 1 - Typical Forward Current vs. Forward Voltage

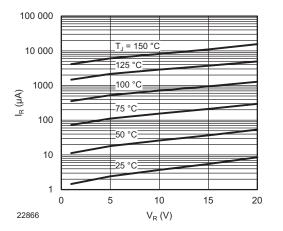


Fig. 2 - Typical Reverse Leakage Current vs. Reverse Voltage

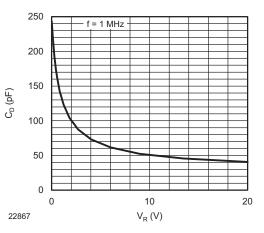


Fig. 3 - Typical Capacitance vs. Reverse Voltage

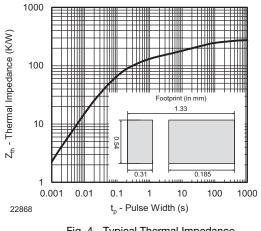
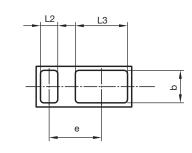


Fig. 4 - Typical Thermal Impedance

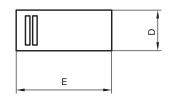




PACKAGE DIMENSIONS in millimeters: CLP1406-2L







Package = Chip Dimensions in mm

	min.	max.	
А	0.25	0.29	
A1		0.02	
b	0.46	0.50	
D	0.59	0.63	
Е	1.39	1.43	
е	0.77		
L2	0.23	0.27	
L3	0.75	0.79	

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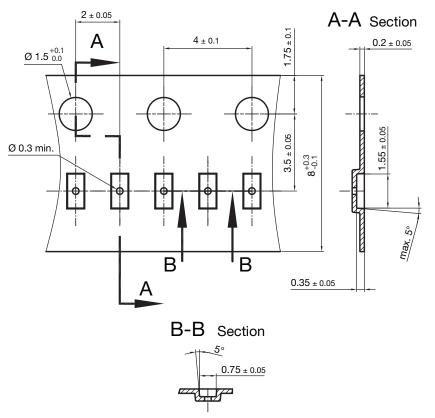
Footprint and soldering recommendation:

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



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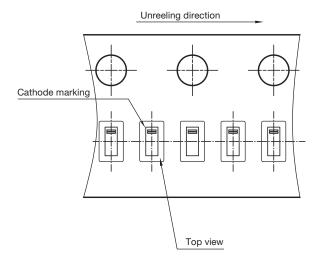
CARRIER TAPE in millimeters: CLP1406-2L



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

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ORIENTATION IN CARRIER CLP1406-2L



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