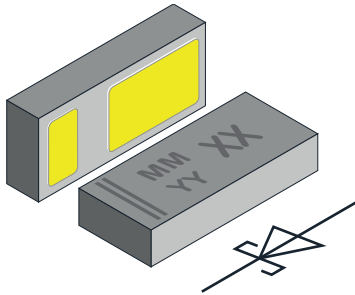


Schottky Rectifier Surface-Mount Flipky® Gen 2



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



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 ($T_{amb} = 25\text{ }^{\circ}\text{C}$, 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)

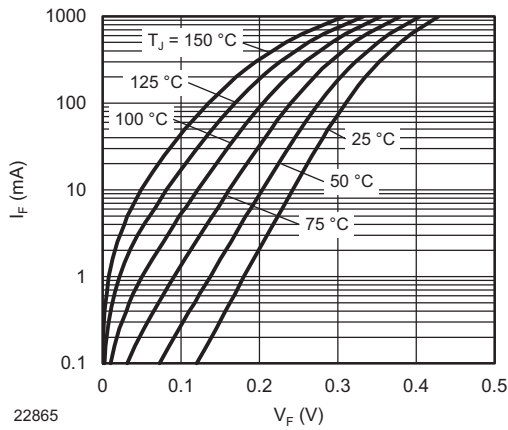


Fig. 1 - Typical Forward Current vs. Forward Voltage

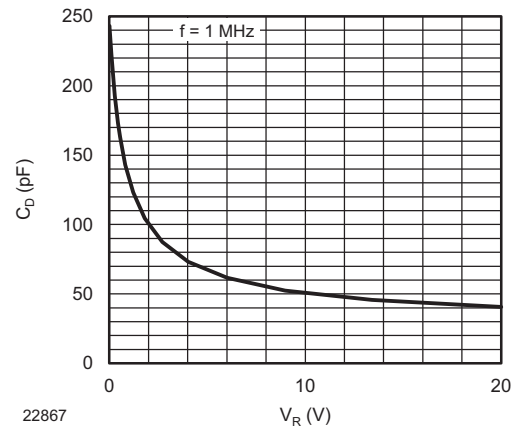


Fig. 3 - Typical Capacitance vs. Reverse Voltage

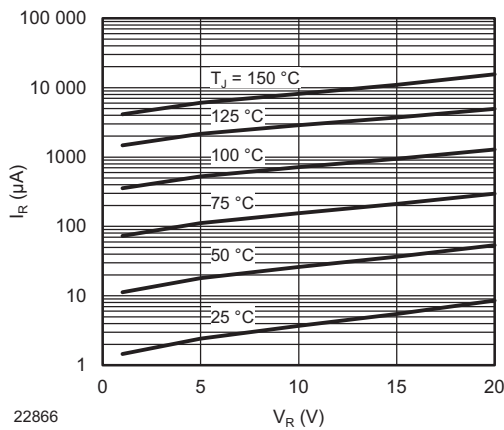


Fig. 2 - Typical Reverse Leakage Current vs. Reverse Voltage

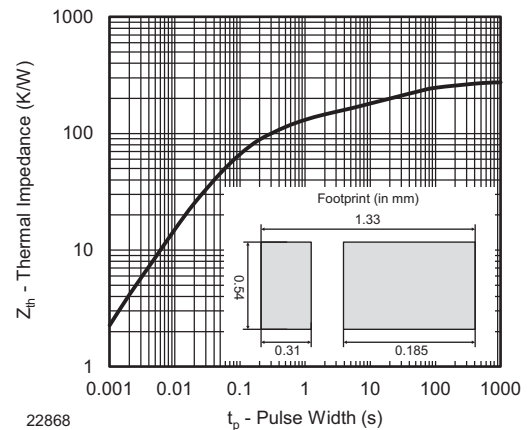
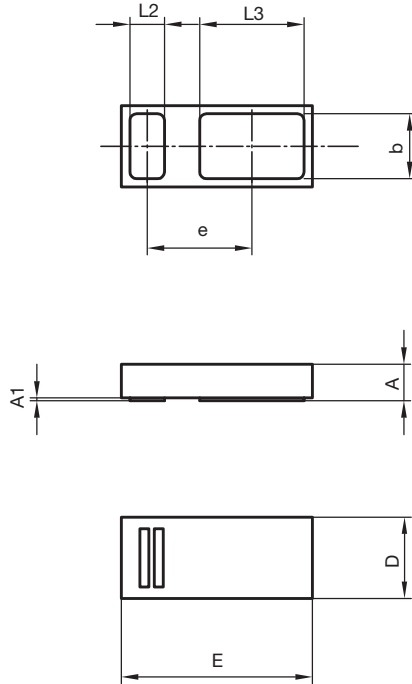


Fig. 4 - Typical Thermal Impedance



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

Document no.:S8-V-3906.04-045 (4)
Created - Date: 22. Jan. 2016
22878

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



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