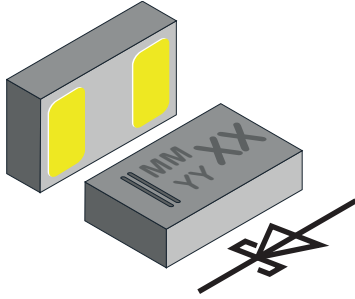




Schottky Rectifier Surface-Mount FlipKY® Gen 2



FEATURES

- Schottky diode for high-speed switching
- Very low dimensions:
1.0 mm x 0.6 mm x 0.29 mm
- 0.5 A forward current
- Low forward voltage drop (typ. 425 mV at 0.5 A)
- Low reverse current (< 15 µA 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
VSKY05401006	VSKY05401006-G4-08	Single	CLP1006-2L	4A	0.400 mg	10 000	10 000

ABSOLUTE MAXIMUM RATINGS (T _{amb} = 25 °C, unless otherwise specified)				
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Maximum repetitive reverse voltage		V _{RRM}	40	V
Maximum average forward rectified current		I _{F(AV)}	0.5	A
Surge forward current	8.3 ms half sine-wave	I _{FSM}	12	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		T _j	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
	V _R = 40 V	I _R	-	75	µA
Forward voltage	I _F = 100 mA	V _F	0.330	0.360	V
	I _F = 0.5 A	V _F	0.425	0.460	V
Diode capacitance	V _R = 0 V, f = 1 MHz	C _D	140	-	pF

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

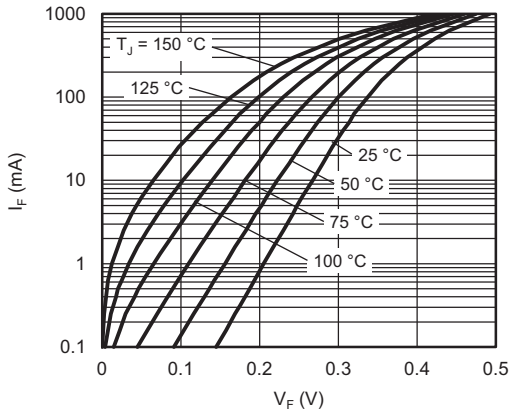


Fig. 1 - Typical Forward Current vs. Forward Voltage

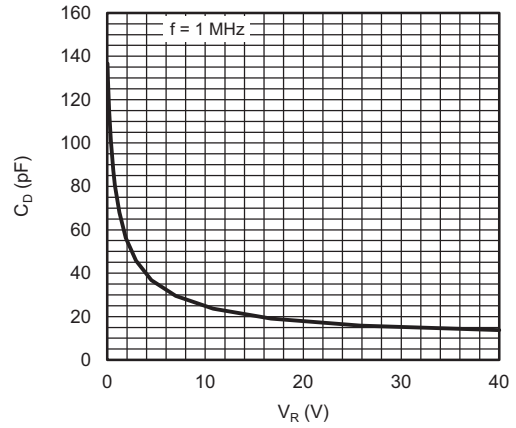


Fig. 3 - Typical Capacitance vs. Reverse Voltage

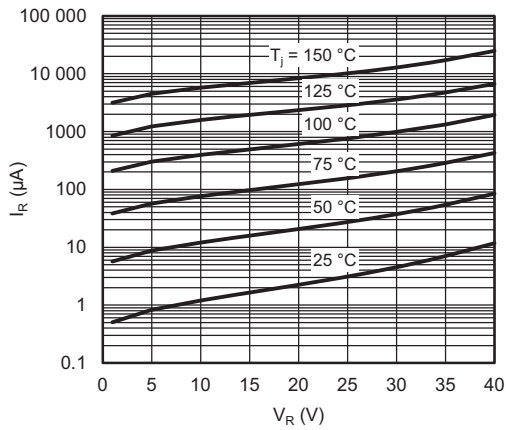


Fig. 2 - Typical Reverse Leakage Current vs. Reverse Voltage

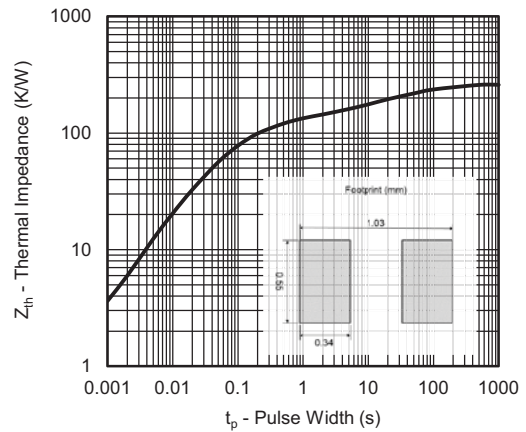
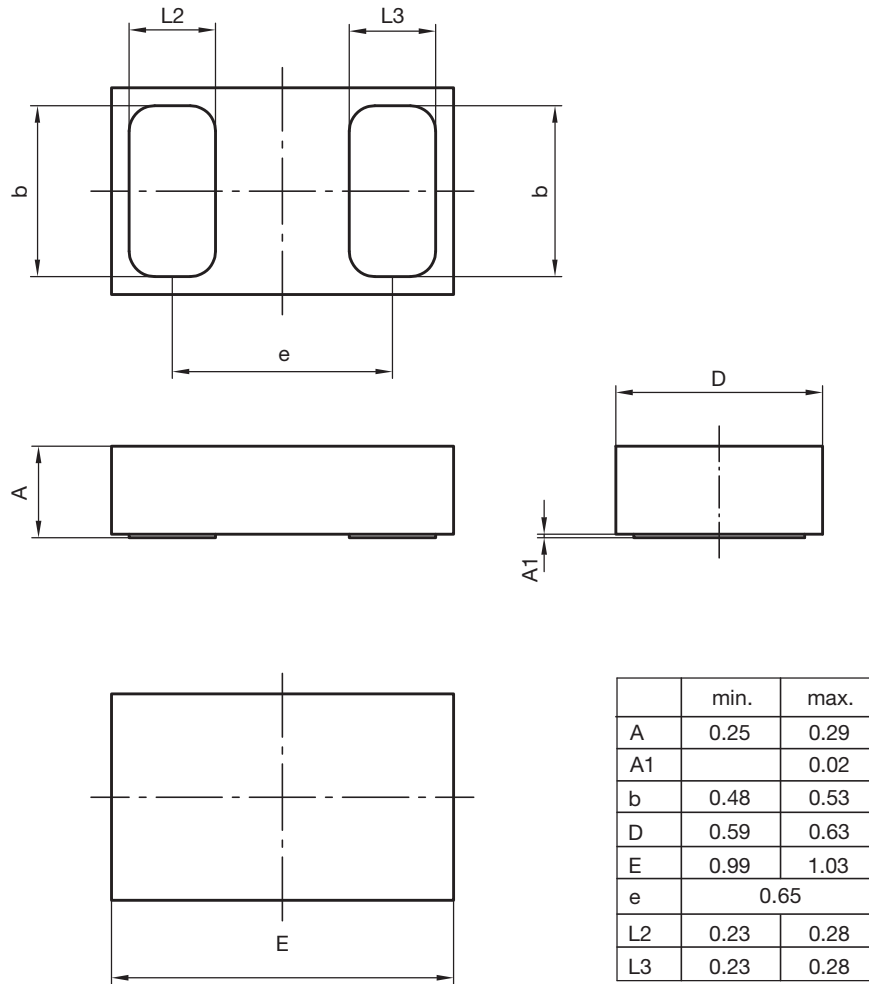


Fig. 4 - Typical Thermal Impedance vs. Time

PACKAGE DIMENSIONS in millimeters: **CLP1006-2L**



Document no.:S8-V-3906.04-039 (4)

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Footprint and soldering recommendation:

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



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