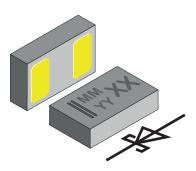


Schottky Rectifier Surface-Mount FlipKY® Gen 2



DESIGN SUPPORT TOOLS AVAILABLE









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 <u>www.vishay.com/doc?99912</u>





RoHS COMPLIANT 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
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	А
Surge forward current	8.3 ms half sine-wave	I _{FSM}	12	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
Lookaga aurrant	V _R = 10 V	I _R	-	15	μA
Leakage current	$V_R = 40 V$	I _R	-	75	μA
Company voltage	I _F = 100 mA	V _F	0.330	0.360	V
Forward voltage	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 ($T_A = 25$ °C unless otherwise noted)

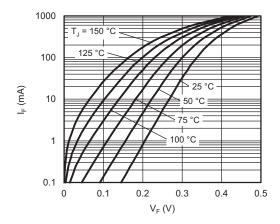


Fig. 1 - Typical Forward Current vs. Forward Voltage

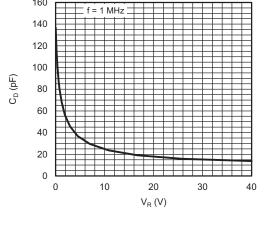


Fig. 3 - Typical Capacitance vs. Reverse Voltage

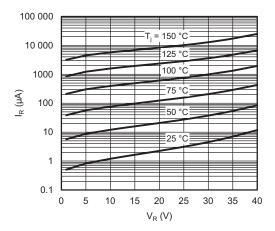


Fig. 2 - Typical Reverse Leakage Current vs. Reverse Voltage

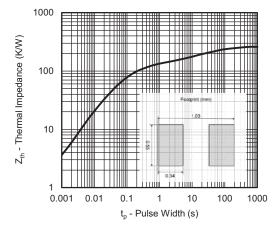
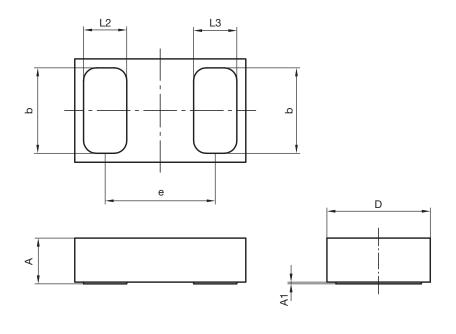
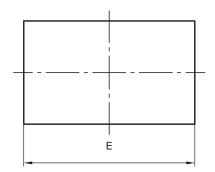


Fig. 4 - Typical Thermal Impedance vs. Time



PACKAGE DIMENSIONS in millimeters: CLP1006-2L





	min.	max.		
Α	0.25	0.29		
A1		0.02		
b	0.48	0.53		
D	0.59	0.63		
Е	0.99	1.03		
е	0.65			
L2	0.23	0.28		
L3	0.23	0.28		

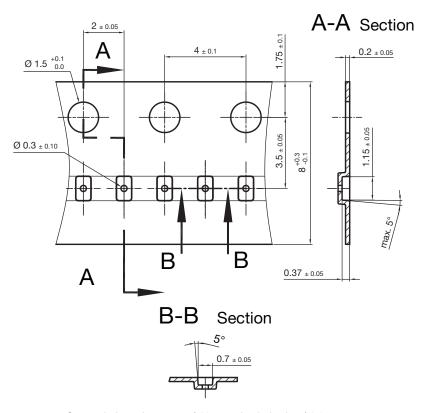
Document no.:S8-V-3906.04-039 (4) Created - Date: 02. April 2015

22784

Footprint and soldering recommendation:

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

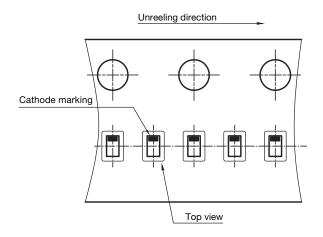
CARRIER TAPE in millimeters: **CLP1006-2L**



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

Carrier tape CLP1006-2L S8-V-3906.04-051 (4) 03.02.2016 22937

ORIENTATION IN CARRIER CLP1006-2L



Orientation in Carrier CLP1006-2L (VSKY) S8-V-3906.04-052 (4) 03.02.2016 22938



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SK33B-TP SK35A-TP SK38B-TP NRVBM120LT1G NTE505 NTSB30U100CT-1G SS15E-TP VS-6CWQ10FNHM3 ACDBA1100LR-HF
ACDBA1200-HF ACDBA140-HF ACDBA2100-HF ACDBA3100-HF CDBQC0530L-HF CDBQC0240LR-HF BAT6202VH6327XTSA1
ACDBA340-HF ACDBA260LR-HF ACDBA1100-HF SK310B-TP MA4E2502L-1246 MA4E2502H-1246 NRVBM120ET1G
NSR01L30MXT5G NTE573