





PRODUCT SUMMARY	
Part number	SiC647
Description	50 A power stage, 4.5 V <sub>IN</sub> to 16 V <sub>IN</sub> , 5 V PWM with ZCD, PS4 mode
Input voltage min. (V)	4.5
Input voltage max. (V)	16
Continuous current rating max. (A)	50
Switch frequency max. (kHz)	2000
Enable (yes / no)	no
Monitoring features	-
Protection	UVLO
Light load mode	ZCD, PS4
Pulse-width modulation (V)	5
Package type	PowerPAK MLP55-31L
Package size (W, L, H) (mm)	5.0 x 5.0 x 0.75
Status code	1
Product type	VRPower (DrMOS)
Applications	Computer, industrial, networking

To request the full version of the datasheet, please contact: [ICmarketing@vishay.com](mailto:ICmarketing@vishay.com)

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**PowerPAK® MLP55-31L Case Outline**


DIM.	MILLIMETERS			INCHES		
	MIN.	NOM.	MAX.	MIN.	NOM.	MAX.
A	0.70	0.75	0.80	0.027	0.029	0.031
A1	0.00	-	0.05	0.000	-	0.002
A2	0.20 ref.			0.008 ref.		
b	0.20	0.25	0.30	0.078	0.098	0.011
b1	0.15	0.20	0.25	0.006	0.008	0.010
D	4.90	5.00	5.10	0.193	0.196	0.200
e	0.50 BSC			0.019 BSC		
e1	3.50 BSC			0.138 BSC		
e2	1.50 BSC			0.060 BSC		
e3	1.00 BSC			0.040 BSC		
E	4.90	5.00	5.10	0.193	0.196	0.200
L	0.35	0.40	0.45	0.013	0.015	0.017
D2-1	0.98	1.03	1.08	0.039	0.041	0.043
D2-2	0.98	1.03	1.08	0.039	0.041	0.043
D2-3	1.87	1.92	1.97	0.074	0.076	0.078
D2-4	0.30 BSC			0.012 BSC		
D2-5	1.05	1.10	1.15	0.041	0.043	0.045
E2-1	1.27	1.32	1.37	0.050	0.052	0.054
E2-2	1.93	1.98	2.03	0.076	0.078	0.080
E2-3	3.75	3.80	3.85	0.148	0.150	0.152
E2-4	0.45 BSC			0.018 BSC		
F1	0.15	0.20	0.25	0.006	0.008	0.010
F2	0.20 ref.			0.008 ref.		
F3	0.15 ref.			0.006 ref.		



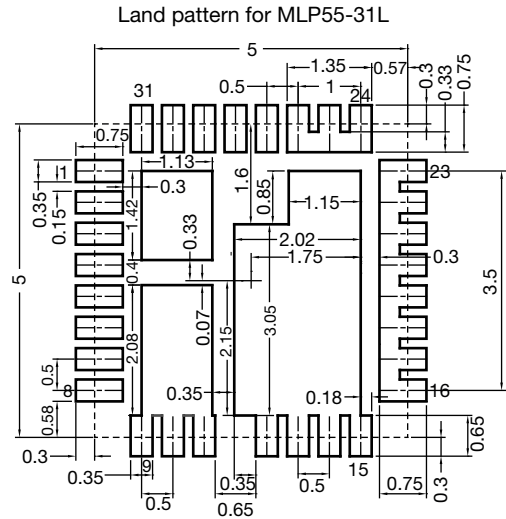
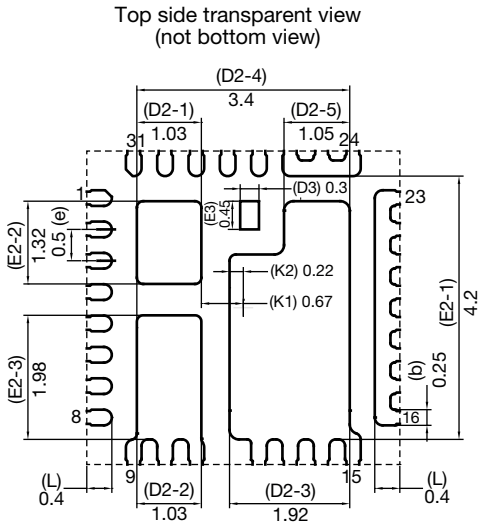
DIM.	MILLIMETERS			INCHES		
	MIN.	NOM.	MAX.	MIN.	NOM.	MAX.
K1		0.67 BSC			0.026 BSC	
K2		0.22 BSC			0.008 BSC	
K3		1.25 BSC			0.049 BSC	
K4		0.10 BSC			0.004 BSC	
K5		0.38 BSC			0.015 BSC	
K6		0.12 BSC			0.005 BSC	
K7		0.40 BSC			0.016 BSC	
K8		0.40 BSC			0.016 BSC	
K9		0.40 BSC			0.016 BSC	
K10		0.85 BSC			0.033 BSC	
K11		0.40 BSC			0.016 BSC	
K12		0.40 BSC			0.016 BSC	
K13		0.75 BSC			0.030 BSC	
ECN: T17-0423-Rev. F, 21-Aug-17 DWG: 6025						

### Notes

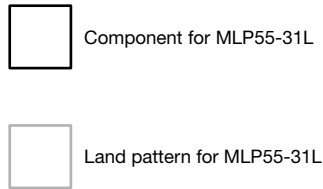
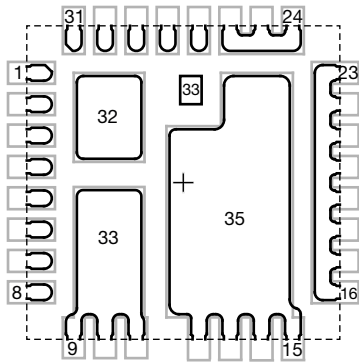
1. Use millimeters as the primary measurement
2. Dimensioning and tolerances conform to ASME Y14.5M. - 1994
3. Dimension b applies to plated terminal and is measured between 0.20 mm and 0.25 mm from terminal tip
4. The pin #1 identifier must be existed on the top surface of the package by using indentation mark or other feature of package body
5. Exact shape and size of this feature is optional
6. Package warpage max. 0.08 mm
7. Applied only for terminals



# Recommended Land Pattern PowerPAK<sup>®</sup> MLP55-31L



All dimensions in millimeters





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