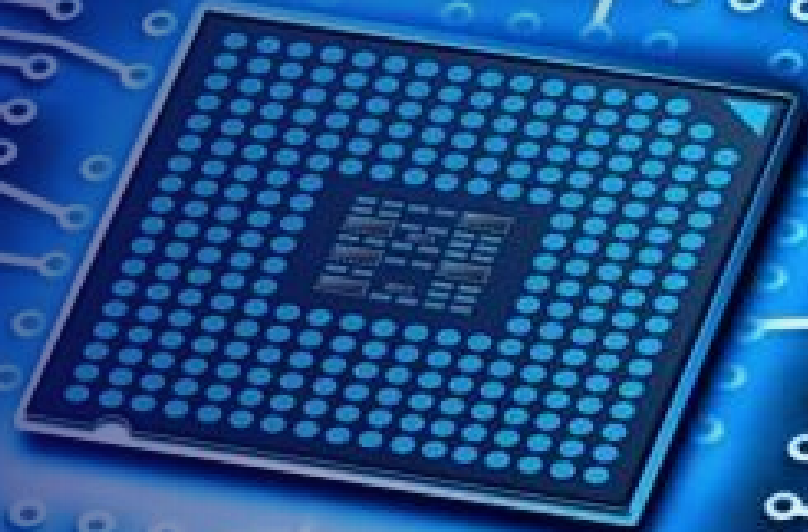


GOFORD

SEMICONDUCTOR

Introduction to TOLT Package

JUNE 2024

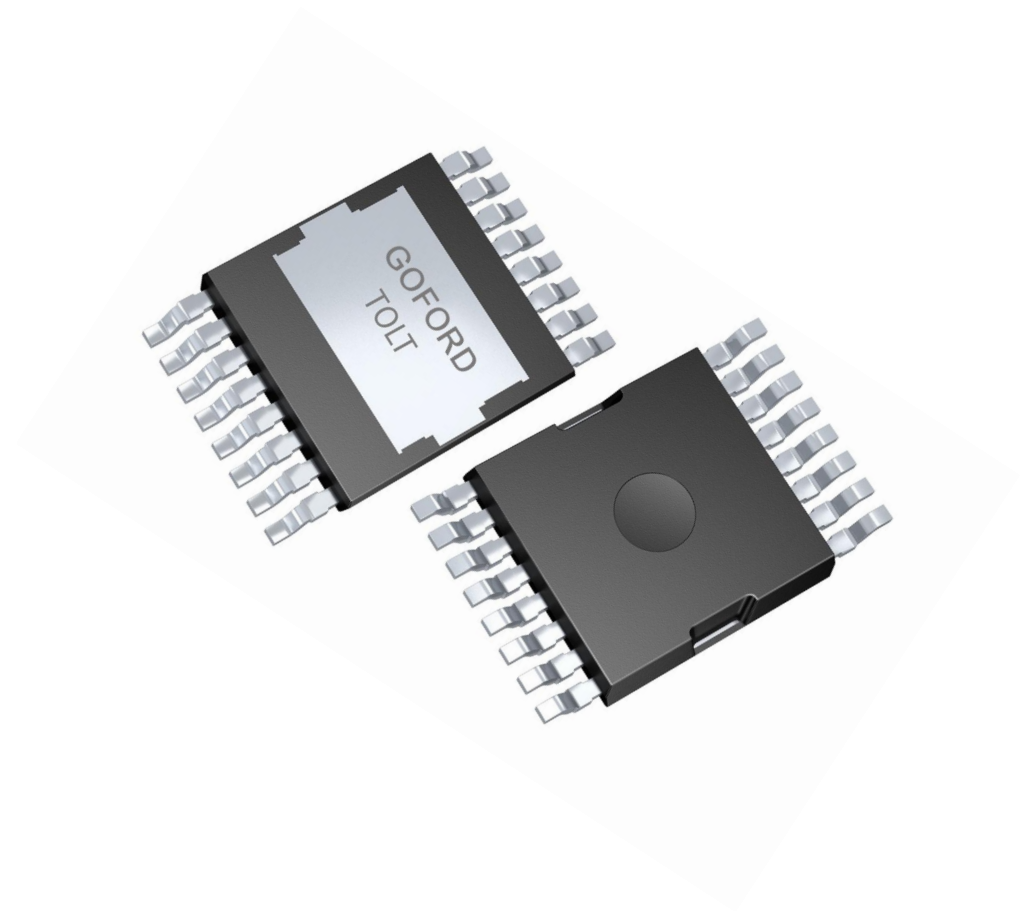


Introduction

- Features
- Advantages
- Dimension

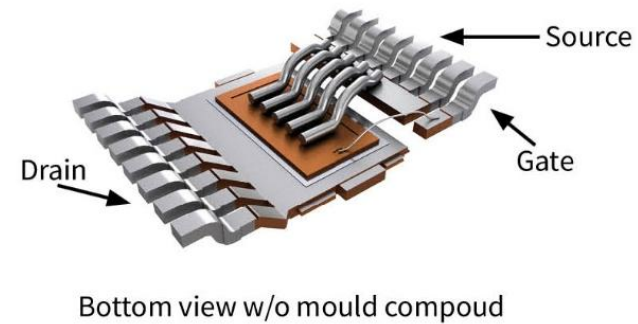
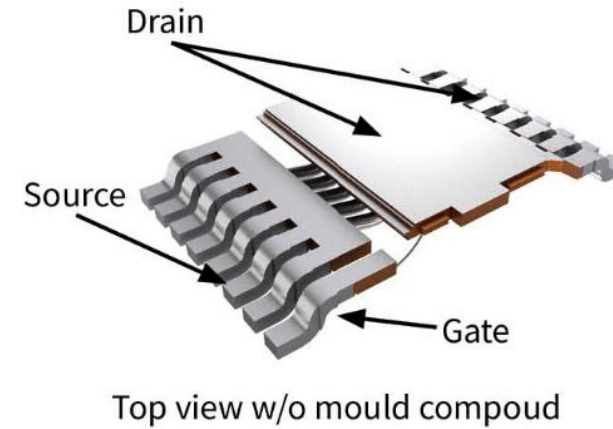
Application

Development



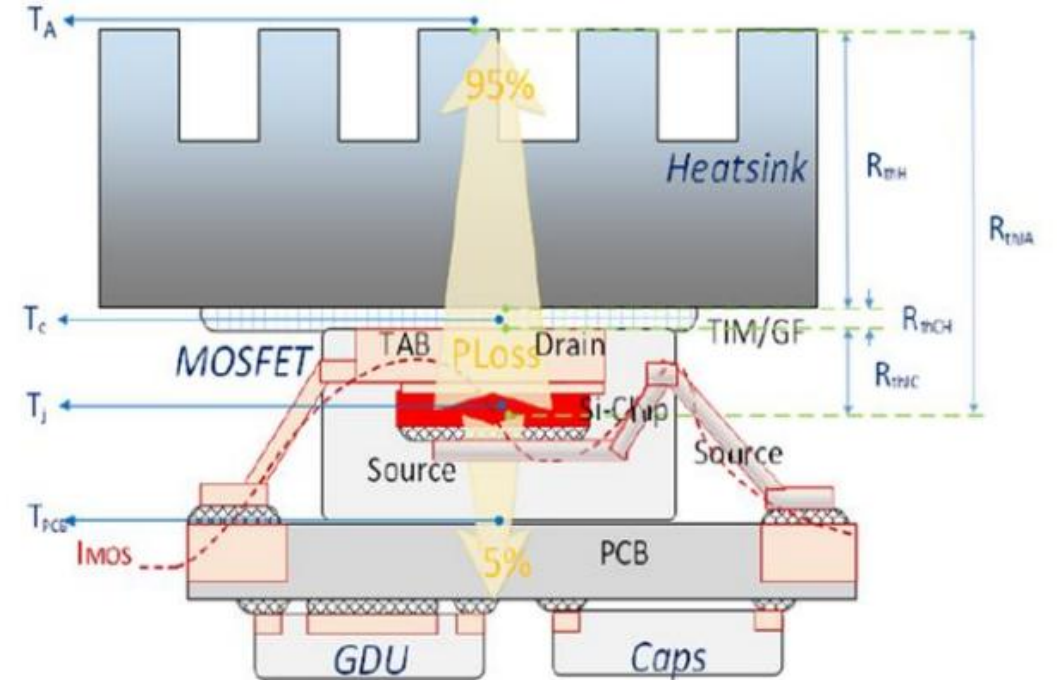
Features

- Low RDS(on)
- High current rating >300 A
- Top-side cooling
- Negative stand-off
- Sn-free exposed pad
- Gull wing



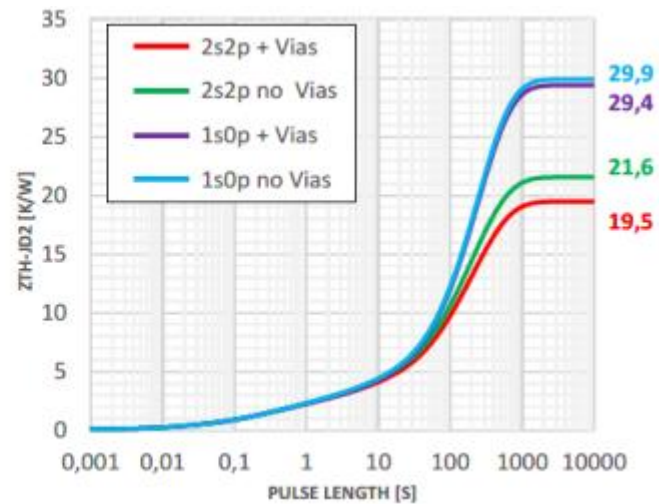
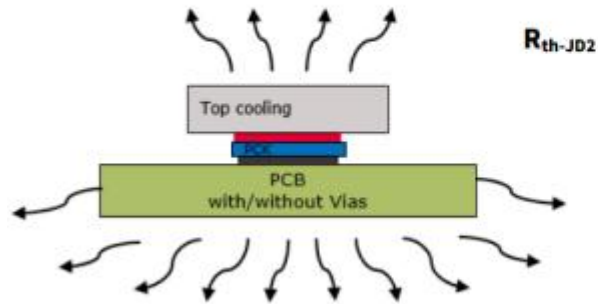
Advantages

- Increased system efficiency enabling extended battery life time
- High power density
- Small profile, high current
- Superior thermal performance

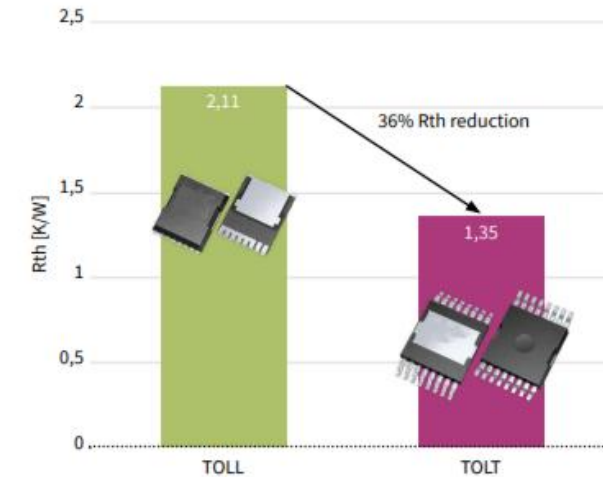


Advantages

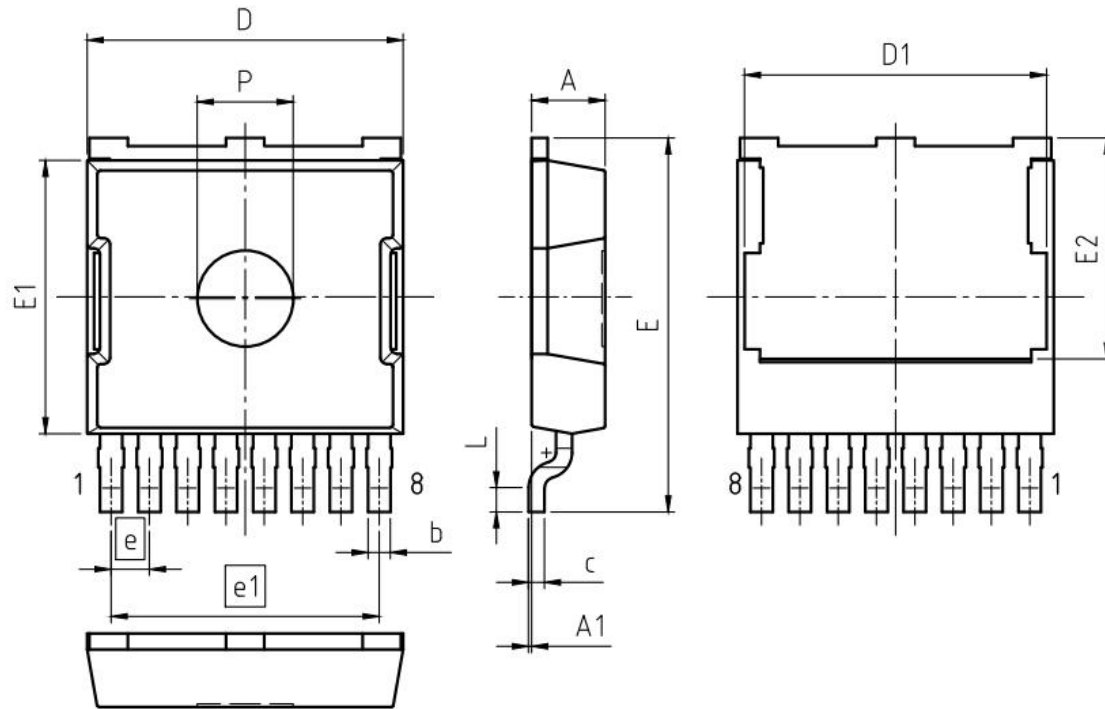
- Saving in cooling system
- Minimized thermal resistance to heatsink, R_{thJA} 20% lower, R_{thJC} 50% improved, $R_{th}(J\text{-heatsink})$ 36% reduced, increase the current capability



TOLT vs. TOLL - Thermal comparison



Dimension



DIMENSIONS	MILLIMETERS	
	MIN.	MAX.
A	2.25	2.35
A1	0.01	0.16
b	0.60	0.80
c	0.40	0.60
D	9.70	10.10
D1	8.20	8.40
E	14.80	15.20
E1	10.00	10.30
E2	5.57	5.77
e	1.20	
e1	8.40	
L	1.40	1.60
P	2.90	3.10

Application

GOFORD

TOLT are ideal for applications which require high thermal performance, big current and small profile.

E scooter



LEV



Power Tools

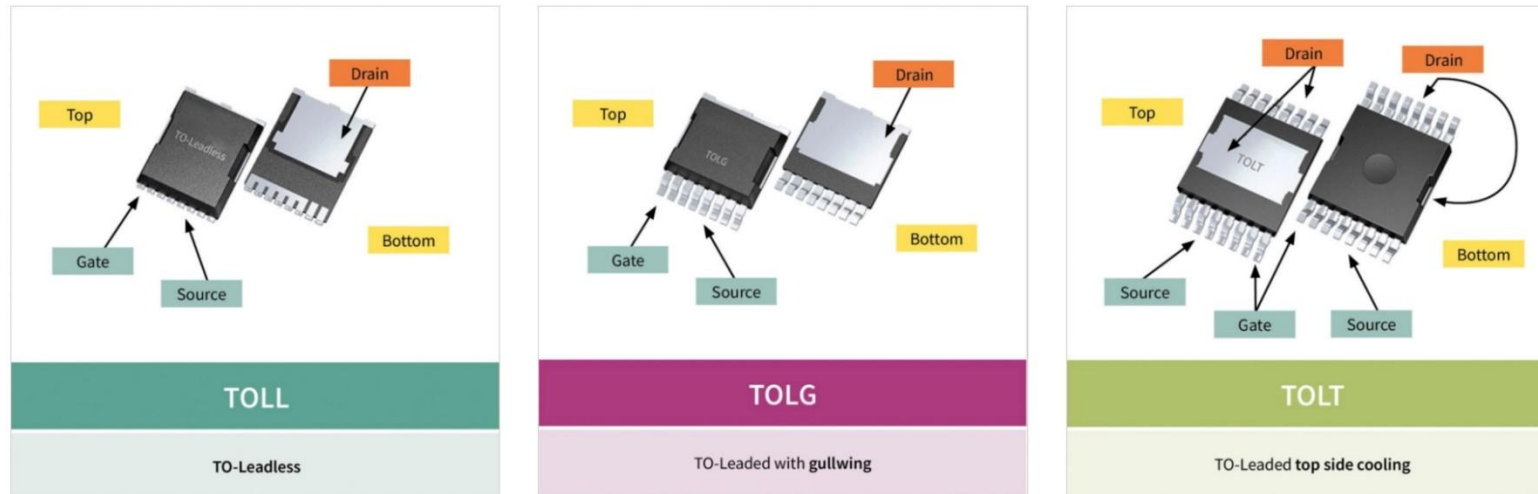


BMS



Development of Toll package

GOFORD



- The TO-Leaded Topside cooling (TOLT) package expands the high-performance package line of the Power MOSFET family.
- The TOLT package is indeed a significant advancement in power MOSFET technology. It retains the high current and low profile benefits of the TOLL package, but with the added advantage of top-side cooling. This feature allows for superior thermal performance, which is crucial in high-power applications.
- This innovative packaged is a key feature that enables high current ratings greater than 300 A for high power density designs.

THANK YOU

GOFORD

WWW.GOFORDSEMI.COM

PH: 0755-29961263

EM: contact@gofordsemi.com
