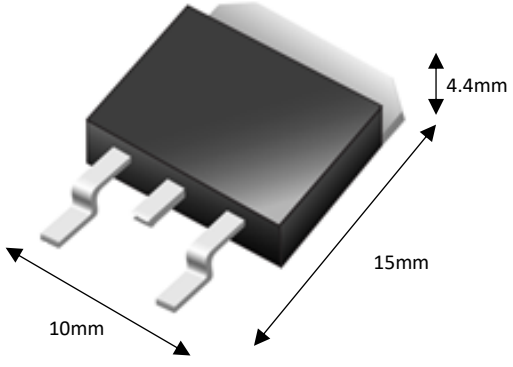
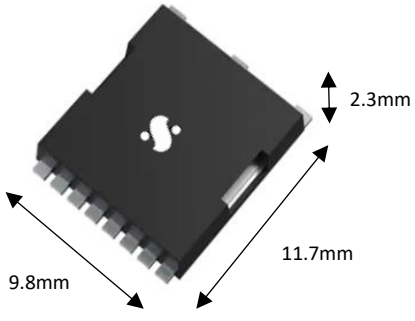
Package Features

The TOLL-8 is a molded package optimized for high power high reliability applications. It´s small mechanical dimensions allow compact designs and high current capability, in addition, the low thermal resistance from junction to case, resulting in lower chip temperatures enables the designer to go for higher power density and higher reliability.

♦ ***Space reduction with a layout 25% smaller & 50% thinner than the D²PAK package***

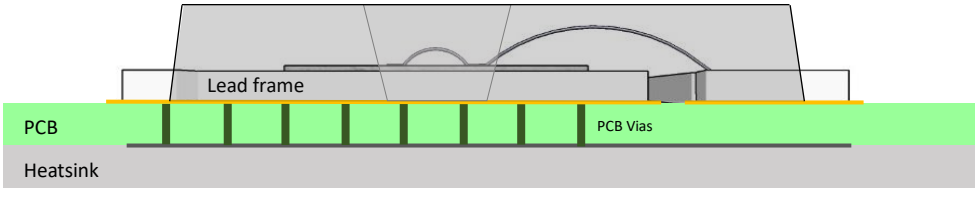


Footprint: 150mm²

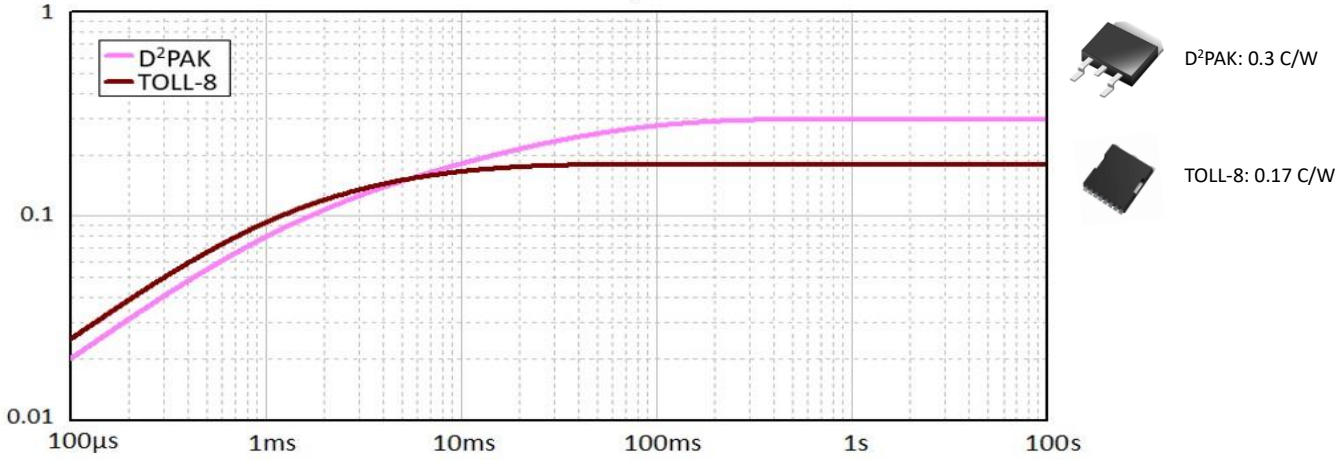


Footprint: 114.6mm²

♦ ***High current capability combined with the low Thermal Resistance (RthJC)***



※Thermal simulations confirm the TOLL-8 packaged MOSFETs' superior heat-dissipation capabilities.



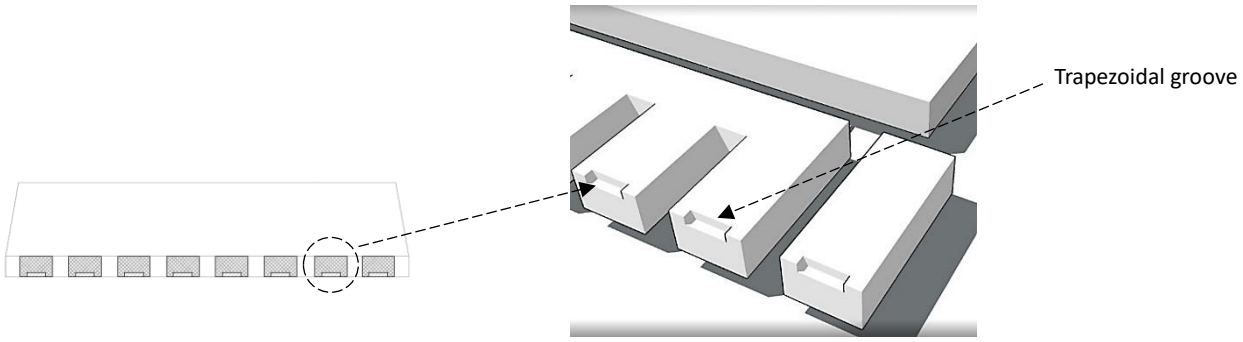
※ZthjC of D²PAK and TOLL-8

TOLL-8

A highly efficient and space-saving package

♦ *Automatic Optical Inspection (AOI)*

Leadless packages like DFN8x8 or DFN5x6 don´t allow an AOI because the solder points are hidden under the package. On the bottom side of the gate and source contacts trapezoidal grooves lead to a visible solder point, avoiding the necessity of an expensive X-Ray inspection.



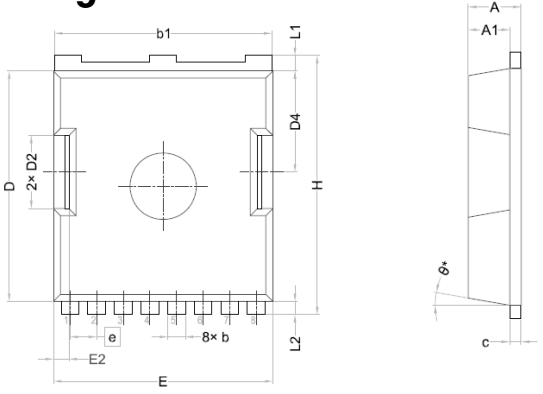
※Tinned trapezoidal grooves on the tips of Gate and Source

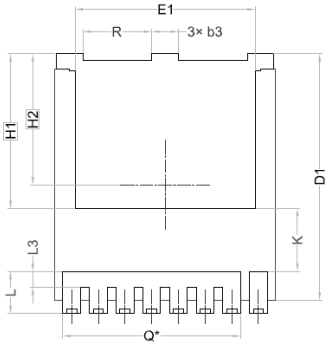
Applications

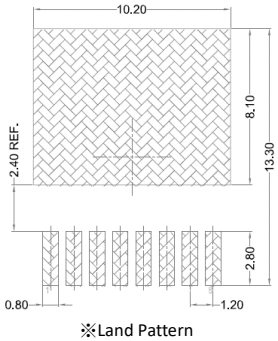
TOLL-8 is suitable for high-power applications, designed for low on-resistance and high-speed-switching MOSFETs. *SeCoS TOLL-8 Parts.*

- ♦ Motors control
- ♦ Battery Management System (BMS)
- ♦ Electric Vehicles(EV)
- ♦ Telecom

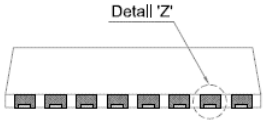
Package Outline

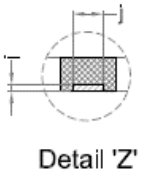






※Land Pattern
for Reference (mm)





Detail 'Z'

Symbol	Dimensions			Symbol	Dimensions		
	Min.	Nom.	Max.		Min.	Nom.	Max.
A	2.20	2.30	2.40	H	11.58	11.68	11.78
A1	1.70	1.80	1.90	H1	BSC		
b	0.70	0.80	0.90	H2	BSC		
b1	9.70	9.80	9.90	I	REF.		
b3	1.10	1.20	1.30	J	REF.		
c	0.40	0.50	0.60	K	REF.		
D	10.28	10.38	10.48	L	1.40	1.90	2.10
D1	10.98	11.08	11.18	L1	0.60	0.70	0.80
D2	3.20	3.30	3.40	L2	0.50	0.60	0.70
D4	4.45	4.55	4.65	L3	0.30	0.70	0.80
E	9.80	9.90	10.00	N	8		
E1	8.00	8.10	8.20	Q	8.00 REF.		
E2	0.60	0.70	0.80	R	3.00	3.10	3.20
e	1.20 BSC			θ	10° REF.		

Unit: mm