

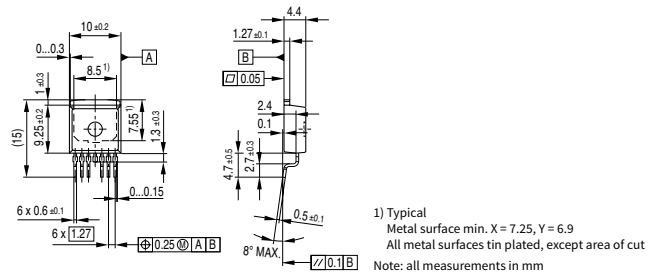
## Selection guide

# CoolMOS™ product offerings in D²PAK and TOLL

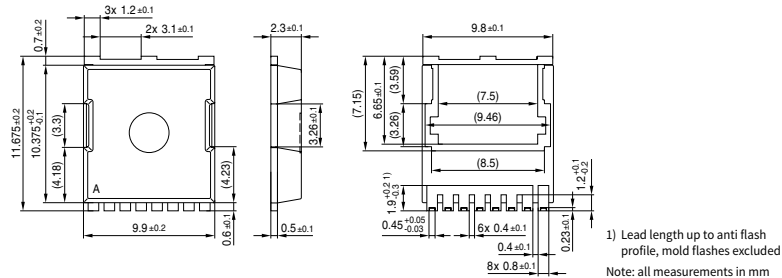
## Including new best-in-class $R_{DS(on)}$ offerings

Infineon Technologies introduces the new product offerings in D²PAK (TO-253) and TO-Leadless (TOLL) packages, including new lowest  $R_{DS(on)}$  CoolMOS™ parts.

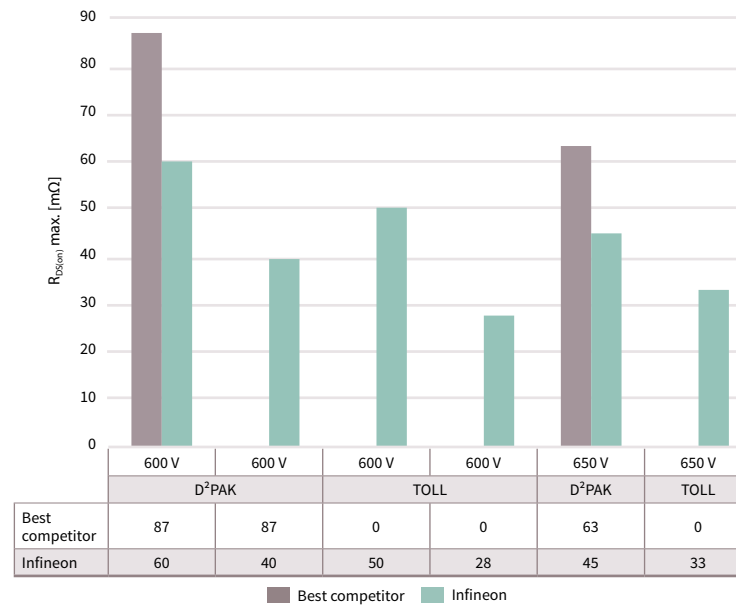
### D²PAK package information – engineering drawing



### TO-Leadless package information – engineering drawing



### Best-in-class $R_{DS(on)}$ comparison for 600 V and 650 V



### Key features

#### TO-Leadless

- > Space reduction versus D²PAK
- > MSL1 compliant, wave and reflow solderable, visual inspection due to grooved leads
- > Low parasitic inductance and 4-pin Kelvin Source connection option
- > Thermal improvement over D²PAK

#### D²PAK

- > Standard footprint

#### TO-Leadless and D²PAK

- > Best-in-class  $R_{DS(on)}$  in 600 V and 650 V
- > SMD packages

### Key benefits

#### TO-Leadless

- > Improved power density
- > Easy to use in manufacturing
- > Improved efficiency and ease of use
- > Can be used in higher current applications

#### D²PAK

- > Drop-in replacement footprint, makes PCB layout easy

#### TO-Leadless and D²PAK

- > Improved efficiency and power density
- > Simplified mounting process for surface mount packages, leads to cost improvements in production



# CoolMOS™ product offerings in D<sup>2</sup>PAK and TO-Leadless

Including new best-in-class  $R_{DS(on)}$  offerings

D<sup>2</sup>PAK and TO-Leadless product availability according to  $R_{DS(on)}$ , voltage class and CoolMOS™ series

		TO-Leadless and D <sup>2</sup> PAK				D <sup>2</sup> PAK		
		$R_{DS(on)}$ group [mΩ]						
Voltage [V]	Series	0–59	60–89	90–149	150–199	200–400	401–660	660–1000
500	C3				SPB21N50C3	SPB16N50C3/SPB12N50C3		SPB04N50C3
	CP			IPB50R140CP	IPB50RR199CP	IPB50R250CP/IPB50R299CP		
600	C6			IPB60R099C6/IPB60R125C6	IPB60R160C6/IPB60R190C6	IPB60R280C6/IPB60R380C6	IPB60R600C6	IPB60R950C6
	C7	IPB60R040C7	IPB60R060C7	IPB60R099C7/IPB60R0120C7	IPB60R0180C7			
	P6				IPB60R160P6/IPB60R190P6	IPB60R230P6/IPB60R280P6/ IPB60R330P6/IPB60R380P6	IPB60R600P6	
	P7	IPB60R045P7	IPB60R060P7/IPB60R080P7	IPB60R099P7/IPB60R120P7	IPB60R180P7	IPB60R280P7/IPB60R360P7		
	C3				SPB20N60C3	SPB11N60C3	SPB07N60C3	SPB04N60C3
	CP			IPB60R099CP/IPB60R125CP	IPB60R165CP/IPB60R199CP	IPB60R299CP/IPB60R385CP		
	G7	IPT60R028G7 IPT60R050G7	IPT60R080G7	IPT60R102G7/IPB60R125G7	IPT60R150G7			
650	CFD7	IPB60R040CFD7 IPB60R055CFD7	IPB60R070CFD7	IPB60R090CFD7/IPB60R105CFD7 IPB60R125CFD7/IPB60R145CFD7	IPB60R170CFD7	IPB60R360CFD7/IPB60R280CFD IPB60R210CFD7		
	C6			IPB65R099C6	IPB65R190C6	IPB65R280C6/IPB65R380C6	IPB65R600E6	
	E6					IPB65R280E6		
	C7	IPB65R045C7	IPB65R065C7	IPB65R095C7/IPB65R125C7	IPB65R190C7	IPB65R225C7		
	CFD2			IPB65R110CFD	IPB65R150CFD/IPB65R190CFD	IPB65R310CFD	IPB65R420CFD/IPB65R660CFD	
800	G7	IPT650R033G7		IPT650R105G7	IPT650R195G7			
	C3					SPB17N80C3		
900	C3					IPB90R340C3		

ACTIVE & PREFERRED    ACTIVE    BEST-IN-CLASS