

# Small-signal MOSFETs in WLCSP

Smallest size – lowest  $R_{DS(on)}$



Small-signal MOSFETs in WLCSP package offer best-in-class  $R_{DS(on)}$  to space ratio, offering space savings of up to 45%, compared to DFN1010 packages. An ideal solution for applications where small form factor is key and providing performance that is higher than equivalent parts in DFN packages. Available in both N-channel and P-channel, all parts are equipped with ESD protection of >2kV and with high power capability of >1300 mW

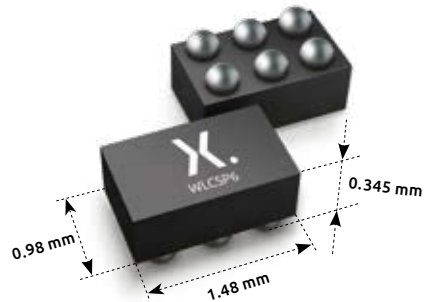
## Features

- › Low  $R_{DS(on)}$  down to 15 m $\Omega$
- › Best-in-class  $R_{DS(on)}$  to space ratio
- › Lowest  $R_{DS(on)}$  per mm<sup>2</sup>
- › Easy PCB Design
- › ESD protection > 2 kV
- ›  $I_D$  up to 9.6 A
- › Low voltage drive ( $V_{GS(th)} = 0.6$  V typ.)
- ›  $V_{DS} = 12$ -20 V;  $V_{GS} = 8$  V
- › Available in both N-channel and P-channel



## Typical applications

- › Wearables
- › E-Cigarettes
- › Mobile Accessories
- › Hearing Aids
- › ID Cards
- › Computing Accessories
- › Battery Polarity
- › Load switching for portable devices
- › Battery switch
- › LED driver

## Small form factor



# Product range

Pol	$V_{GS}$ (V)	$V_{GS}$ (V)	$I_D$ (A)	$V_{GSth}$ Min (V)	$V_{GSth}$ Max (V)	ESD Protection (kV)	$R_{DSon}$ typ (m $\Omega$ ) @ $V_{GS} =$				WLCSP4	WLCSP6
							4.5 V	2.5 V	1.8 V	1.5 V		
N	12	8	6	0.4	0.9	2	36	46	60	86	PMCM4401VNE	
			9.6	0.4	0.9	2	15	18	22	30		PMCM6501VNE
	20	8	5.5	0.4	0.9	2	43	55	65	75	PMCM4401UNE	
			8.7	0.4	0.9	2	17	20	22	30		PMCM6501UNE
P	12	8	4.9	0.4	0.9	2	55	77	110	-	PMCM4401VPE	
			8.2	0.4	0.9	2	19	25	37	-		PMCM6501VPE
	20	8	4	0.4	0.9	2	75	95	130	-	PMCM4401UPE	
			4.2	0.4	0.9	2	65	88	120	-	PMCM4402UPE	
			7.3	0.4	0.9	2	22	28	38	-		PMCM6501UPE

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**Date of release:**  
March 2018