

# **P-channel MOSFETs**

**Selection guide 2023** 



### **Power P-channel MOSFETs**



Voltage [V]		TO-252 (DPAK)	TO-263 (D²PAK)	TO-220	PQFN 3.3x3.3	SuperSO8	<b>S</b> 08	PQFN 2x2
							BSO201SP H $R_{DS(on)} = 7.0 \text{ m}\Omega$	
	-20						N <sub>DS(on)</sub> =7.0 HIX2	IRLHS2242TRPBF**
						BSC030P03NS3 G	IRF9310	$R_{DS(on)} = 31.0 \text{ m}\Omega$
						$R_{DS(on)} = 3.0 \text{ m}\Omega$	$R_{DS(on)}$ =4.6 m $\Omega$	
		IPD042P03L3 G R <sub>DS(on)</sub> =4.2 mΩ				BSC060P03NS3E G $R_{DS(on)}$ =6.0 m $\Omega$ ; ESD	IRF9317 R <sub>DS(on)</sub> =6.6 mΩ	
		DS(on)			BSZ086P03NS3 G	IRFH9310	IRF9321	
		CDD 500001 C 1)*			$R_{DS(on)} = 8.6 \text{ m}\Omega$	$R_{DS(on)} = 4.6 \text{ m}\Omega$	$R_{DS(on)} = 7.2 \text{ m}\Omega$	
		SPD50P03L G <sup>1)*</sup> $R_{DS(on)} = 7.0 \text{ m}\Omega$			BSZ086P03NS3E G $R_{DS(on)}$ =8.6 m $\Omega$			
		SS(SI)			SACIN	BSC084P03NS3 G		
					BSZ120P03NS3 G	$R_{DS(on)} = 8.4 \text{ m}\Omega$	BSO301SP H	
					$R_{DS(on)} = 12.0 \text{ m}\Omega$		$R_{DS(on)} = 8.0 \text{ m}\Omega$	
	-30						IRF9388TRPBF $R_{DS(on)}$ =11.9 m $\Omega$	
							IRF9358	
					DC7100D02NC2 C		$R_{DS(on)}$ =16 mΩ; dual	
					BSZ180P03NS3 G $R_{DS(on)}$ =18.0 mΩ			
					BSZ180P03NS3E G			
					$R_{DS(on)} = 18.0 \text{ m}\Omega; ESD$			IRFHS9301TRPBF
								$R_{DS(on)} = 37.0 \text{ m}\Omega$
							$R_{DS(on)}$ =21 mΩ; dual	
							IRF9335	
Z		IPD380P06NM	IPB110P06LM	SPP80P06P H*	ISZ810P06LM	ISC240P06LM	$R_{DS(on)} = 59 \text{ m}\Omega$	
SFE	-60	$R_{DS(on)} = 38 \text{ m}\Omega$	$R_{DS(on)} = 11 \text{ m}\Omega$	$R_{DS(on)} = 23.0 \text{ m}\Omega$	$R_{DS(on)} = 81 \text{ m}\Omega$	$R_{DS(on)} = 24 \text{ m}\Omega$		
M la		IPD650P06NM $R_{DS(on)}$ = 65 mΩ	SPB80P06P G* $R_{DS(on)} = 23.0 \text{ m}\Omega$			$R_{DS(on)} = 80 \text{ m}\Omega$		
P-channel MOSFETs		SPD30P06P G*	N <sub>DS(on)</sub> -23.0 1112			N <sub>DS(on)</sub> – 80 msz		
		$R_{DS(on)} = 75.0 \text{ m}\Omega$						
		IPD900P06NM $R_{DS(on)} = 90 \text{ m}\Omega$						
		SPD18P06P G*						
		R <sub>DS(on)</sub> =130.0 mΩ SPD09P06PL G*						
		$R_{DS(on)} = 250.0 \text{ m}\Omega$						
		IPD25DP06NM $R_{DS(on)} = 250 \text{ m}\Omega$						
		SPD08P06P G*						
		R <sub>DS(on)</sub> =300.0 mΩ						
		IPD40DP06NM $R_{DS(on)} = 400 \text{ m}\Omega$						
	-100	SPD15P10PL G*	IPB320P10LM		ISZ24DP10LM	ISC750P10LM		
		R <sub>DS(on)</sub> =200.0 mΩ SPD15P10P G*	$R_{DS(on)} = 32 \text{ m}\Omega$ IPB330P10NM	IPP330P10NM	$R_{DS(on)} = 245 \text{ m}\Omega$	$R_{DS(on)} = 75 \text{ m}\Omega$		
		$R_{DS(on)} = 240.0 \text{ m}\Omega$	$R_{DS(on)} = 33 \text{ m}\Omega$	$R_{DS(on)} = 33 \text{ m}\Omega$				
		SPD04P10PL G*	IPB19DP10NM					
		R <sub>DS(on)</sub> =850.0 mΩ IPD11DP10NM	$R_{DS(on)} = 185 \text{ m}\Omega$					
		$R_{DS(on)} = 111 \text{ m}\Omega$						
		IPD18DP10LM $R_{DS(on)} = 178 \text{ m}\Omega$						
		IPD19DP10NM						
		$R_{DS(on)} = 186 \text{ m}\Omega$ IPD42DP15LM	IPB720P15LM		ISZ56DP15LM	ISC16DP15LM		
	-150	$R_{DS(on)} = 420 \text{ m}\Omega$	$R_{DS(on)} = 72 \text{ m}\Omega$		$R_{DS(on)} = 560 \text{ m}\Omega$	$R_{DS(on)} = 160 \text{ m}\Omega$		
					ISZ75DP15LM			
					$R_{DS(on)} = 750 \text{ m}\Omega$ ISZ15EP15LM			
					$R_{DS(on)} = 1500 \text{ m}\Omega$			

## **Power MOSFETs complementary**







早春

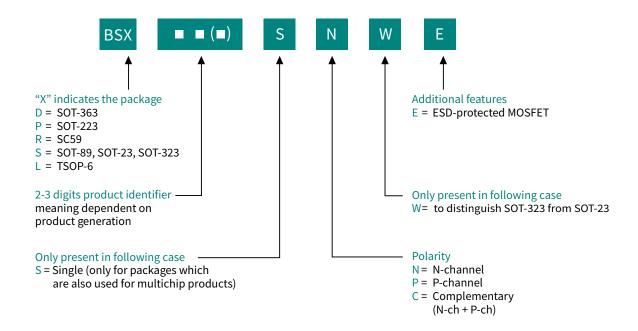
Voltage [V]			PQFN 3.3x3.3	S08		
Complementary	-20/20	>50 mΩ	BSZ15DC02KD H*/** N: 55 mΩ, 5.1 A P: 150 mΩ, -3.2 A BSZ215C H*/** N: 55 mΩ, 5.1 A P: 150 mΩ, -3.2 A			
Con	-30/30	27-64 mΩ		IRF9389 N: 27 mΩ, 6.8 A P: 64 mΩ, -4.6 A		

www.infineon.com/pchannel www.infineon.com/complementary

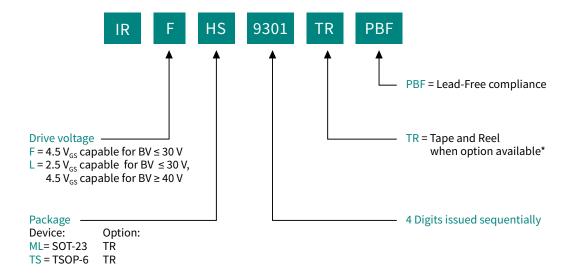
<sup>\*</sup> Products are qualified to Automotive AEC Q101 \*\*  $\rm R_{\rm DS(on)}$  specified at 4.5 V 1) 5-leg

# **Nomenclature**

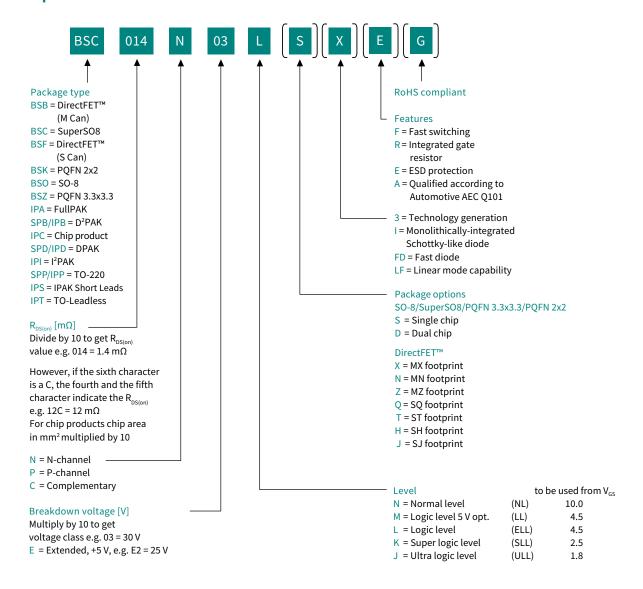
# Small signal



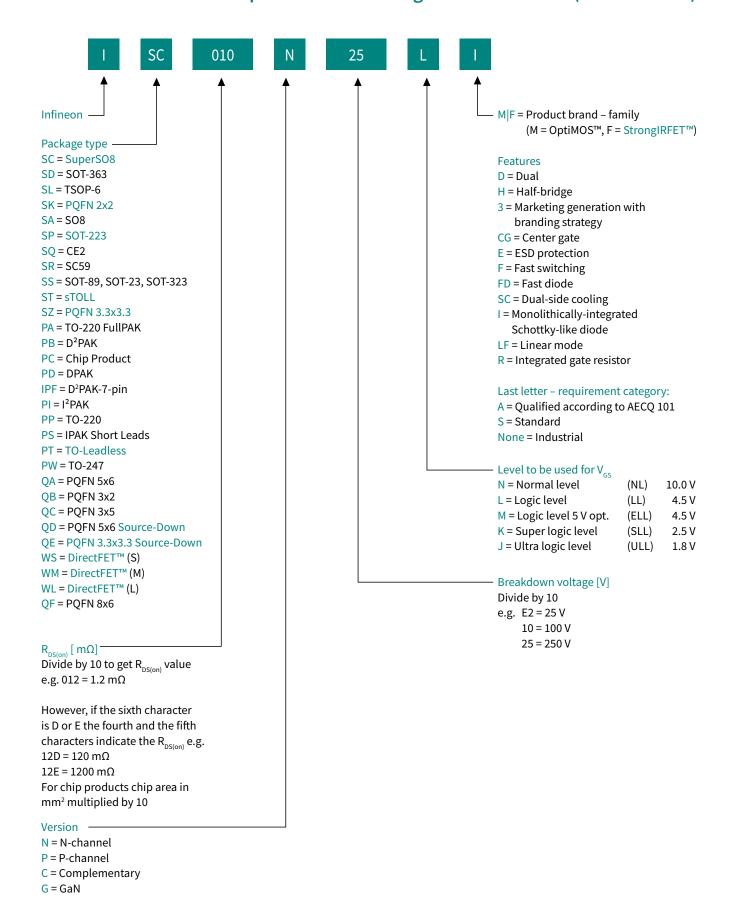
## **Small power**



### **OptiMOS™**



# New nomenclature for OptiMOS™ and StrongIRFET™ MOSFETs (2019 onward)



# Where to buy

#### Infineon distribution partners and sales offices:

www.infineon.com/wheretobuy

### Service hotline

Infineon offers its toll-free 0800/4001 service hotline as one central number, available 24/7 in English, Mandarin and German.

- Germany 0800 951 951 951 (German/English)
- China, mainland 4001 200 951 (Mandarin/English)
- India 000 800 4402 951 (English)
- USA 1-866 951 9519 (English/German)
- Other countries 00\* 800 951 951 951 (English/German)
- Direct access +49 89 234-0 (interconnection fee, German/English)
- \* Please note: Some countries may require you to dial a code other than "00" to access this international number.

Please visit www.infineon.com/service for your country!

### www.infineon.com

Published by Infineon Technologies Austria AG 9500 Villach, Austria

© 2023 Infineon Technologies AG. All Rights Reserved.

#### Please note!

This Document is for information purposes only and any information given herein shall in no event be regarded as a warranty, guarantee or description of any functionality, conditions and/or quality of our products or any suitability for a particular purpose. With regard to the technical specifications of our products, we kindly ask you to refer to the relevant product data sheets provided by us. Our customers and their technical departments are required to evaluate the suitability of our products for the intended application.

We reserve the right to change this document and/or the information given herein at any time.

#### Additional information

For further information on technologies, our products, the application of our products, delivery terms and conditions and/or prices, please contact your nearest Infineon Technologies office (www.infineon.com).

#### Warnings

Due to technical requirements, our products may contain dangerous substances. For information on the types in question, please contact your nearest Infineon Technologies office.

Except as otherwise explicitly approved by us in a written document signed by authorized representatives of Infineon Technologies, our products may not be used in any life-endangering applications, including but not limited to medical, nuclear, military, life-critical or any other applications where a failure of the product or any consequences of the use thereof can result in personal injury.

Document number: B115-I1437-V1-7600-EU-EC