



Small Signal and Small Power MOSFETs

Selection guide

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Small Signal and Small power MOSFETs N-channel product portfolio $\leq 30\text{ V}$ 

Voltage	TSOP-6	SC59	SOT-23	SOT-323	SOT-363
20 V	BSL202SN ⁴⁾ 36 m Ω , 7.5 A, SLL	BSR802N ⁵⁾ 32 m Ω , 3.7 A, ULL	IRLML2402 ^{1) 3)} 25m Ω , 1.2 A, SLL	BSS816NW ⁵⁾ 240 m Ω , 1.4 A, ULL	BSD214SN ⁴⁾ 250 m Ω , 1.5 A, SLL
	IRLMS2002 ^{1) 4)} 45 m Ω , 6.5 A, SLL	BSR202N ⁴⁾ 33 m Ω , 3.8 A, SLL	IRLML6244 ^{1) 4)} 27 m Ω , 6.3 A, SLL	BSS214NW ⁴⁾ 250 m Ω , 1.5 A, SLL	BSD840N ⁵⁾ 560 m Ω , 0.88 A, ULL, dual
	BSL806N ⁵⁾ 82 m Ω , 2.3 A, ULL, dual		IRLML6246 ^{1) 4)} 66 m Ω , 4.1 A, SLL		BSD235N ⁴⁾ 600 m Ω , 0.95 A, SLL, dual
	IRLMS1902 ^{1) 3)} 100m Ω , 3.2 A, SLL		IRLML2502 ^{1) 4)} 80 m Ω , 4.2 A, SLL		
			BSS806N ⁵⁾ 82 m Ω , 2.3 A, ULL		
			BSS806NE ⁵⁾ 82 m Ω , 2.3 A, ULL, ESD		
			BSS205N ⁴⁾ 85 m Ω , 2.5 A, SLL		
			BSS214N ⁴⁾ 250 m Ω , 1.5 A, SLL		
25 V			IRFML8244 ^{1) 3)} 41 m Ω , 5.8 A, NL		
30 V	IRLTS6342 ^{1) 4)} 22 m Ω , 8.3 A, SLL		IRLML6344 ^{1) 4)} 37 m Ω , 5.0 A, LL		BSD316SN ³⁾ 280 m Ω , 1.4 A, LL
	IRFTS8342 ^{1) 3)} 29 m Ω , 8.2 A, LL		IRLML0030 ^{1) 3)} 40 m Ω , 5.3 A, LL		
	IRLMS1503 ^{1) 3)} 200m Ω , 3.2A, LL		IRLML6346 ^{1) 4)} 80 m Ω , 3.4 A, LL		
			BSS306N ³⁾ 93 m Ω , 2.3 A, LL		
			IRLML2030 ^{1) 3)} 154 m Ω , 2.7 A, LL		
			BSS316N ³⁾ 280 m Ω , 1.4 A, LL		
			IRLML28031 ³⁾ 400 m Ω , 1.2 A, LL		

1) not qualified to Automotive AEC-Q101

2) $R_{DS(on)}$ specified at 10 V3) $R_{DS(on)}$ specified at 4.5 V4) $R_{DS(on)}$ specified at 2.5 V5) $R_{DS(on)}$ specified at 1.8 V6) $R_{DS(on)}$ specified at 0 V

Small Signal and Small power MOSFETs N-channel product portfolio 40 V to 100 V



Voltage	SOT-223	TSOP-6	SOT-89	SOT-23	SOT-323	SOT-363
40 V				IRLML0040 ^{1) 3)} 78 mΩ, 3.6 A, LL		
55 V	IRFL024Z ^{1) 2)} 57.5 mΩ, 5.1 A, NL			BSS670S2L ³⁾ 825 mΩ, 0.54 A, LL		
60 V	BSP320S ²⁾ 120 mΩ, 2.9 A, NL	BSL606SN ³⁾ 95 mΩ, 4.5 A, LL	BSS606N ³⁾ 90 mΩ, 3.2 A, LL	IRLML0060 ^{1) 3)} 116 mΩ, 2.7 A, LL	BSS138W ³⁾ 4 Ω, 0.28 A, LL	2N7002DW ³⁾ 4 Ω, 0.3 A, LL, dual
	BSP318S ³⁾ 150 mΩ, 2.6 A, LL			IRLML2060 ^{1) 3)} 640 mΩ, 1.2 A, LL	SN7002W ³⁾ 7.5 Ω, 0.23 A, LL	
	BSP295 ³⁾ 500 mΩ, 1.8 A, LL			2N7002 ^{1) 3)} 4 Ω, 0.3 A, LL		
				BSS138I ^{1) 3)} 4 Ω, 0.23 A, LL		
				BSS138N ³⁾ 4 Ω, 0.23 A, LL		
				SN7002I ^{1) 3)} 7.5 Ω, 0.2 A, LL		
				SN7002N ³⁾ 7.5 Ω, 0.2 A, LL		
				BSS7728N ³⁾ 7.5 Ω, 0.2 A, LL		
				BSS159N ⁶⁾ 8 Ω, 0.13 A, depletion		
	BSP373N ²⁾ 240 mΩ, 1.8 A, NL			IRLML0100 235 mΩ, 1.6 A, LL		
100 V	BSP372N ³⁾ 270 mΩ, 1.8 A, LL			BSS119N ³⁾ 10 Ω, 0.19 A, LL		
	BSP296N ³⁾ 800 mΩ, 1.2 A, LL			BSS123I ^{1) 3)} 10 Ω 0.19 A, LL		
				BSS123N ³⁾ 10 Ω 0.19 A, LL		
				BSS169I ^{1) 6)} 12 Ω, 0.09 A, depletion		
				BSS169 ⁶⁾ 12 Ω, 0.09 A, depletion		

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2) $R_{DS(on)}$ specified at 10 V3) $R_{DS(on)}$ specified at 4.5 V4) $R_{DS(on)}$ specified at 2.5 V5) $R_{DS(on)}$ specified at 1.8 V6) $R_{DS(on)}$ specified at 0 V

Small Signal and Small power MOSFETs N-channel product portfolio >100 V



Voltage	SOT-223	TSOP-6	SOT-89	SOT-23
150 V		IRF5802 ^{1) 2)} 1.2 Ω , 0.9 A, NL		
200 V	BSP297 ³⁾ 3 Ω , 0.66 A, LL BSP149 ⁶⁾ 3.5 Ω , 0.14 A, LL, depletion	IRF5801 ^{1) 2)} 2.2 Ω , 0.6 A, NL		
240 V	BSP88 ³⁾ 7.5 Ω , 0.35 A, LL BSP89 ³⁾ 7.5 Ω , 0.35 A, LL BSP129 ⁶⁾ 20 Ω , 0.05 A, LL, depletion		BSS87 ³⁾ 7.5 Ω , 0.26 A, LL	BSS131 ³⁾ 20 Ω , 0.11 A, LL
250 V				BSS139I ⁶⁾ 30 Ω , 0.10 A, LL, depletion BSS139 ⁶⁾ 30 Ω , 0.10 A, LL, depletion
400 V	BSP324 ³⁾ 22 Ω , 0.17 A, LL			
600 V	BSP125 ³⁾ 60 Ω , 0.12 A, LL BSP135I ^{1) 6)} 60 Ω , 0.02 A, LL, depletion BSP135 ⁶⁾ 60 Ω , 0.02 A, LL, depletion		BSS225 ³⁾ 45 Ω , 0.09 A, LL	BSS127I ^{1) 3)} 600 Ω , 0.021 A, LL BSS127 ³⁾ 600 Ω , 0.021 A, LL BSS126I ^{1) 6)} 700 Ω , 0.021 A, LL, depletion BSS126 ⁶⁾ 700 Ω , 0.021 A, LL, depletion

1) not qualified to Automotive AEC-Q101

2) $R_{DS(on)}$ specified at 10 V3) $R_{DS(on)}$ specified at 4.5 V4) $R_{DS(on)}$ specified at 2.5 V5) $R_{DS(on)}$ specified at 1.8 V6) $R_{DS(on)}$ specified at 0 V

Small Signal and Small power MOSFETs P-channel product portfolio -60 V to -250 V



Voltage	SOT-223	SOT-89	SC59	SOT-23	SOT-323
-250 V	BSP317P ³⁾ 5 Ω, -0.43 A, LL	BSS192P ³⁾ 15 Ω, -0.19 A, LL	BSR92P ³⁾ 13 Ω, -0.14 A, LL		
	BSP92P ³⁾ 15 Ω, -0.26 A, LL				
-100 V	BSP321P ²⁾ 0.9 Ω, -0.98 A, NL		BSR316P ³⁾ 2.2 Ω, -0.36 A, LL		
	BSP322P ³⁾ 1 Ω, -1.0 A, LL				
	BSP316P ³⁾ 2.3 Ω, -0.68 A, LL				
-60 V	ISP650P06NM ^{1) 2)} 65 mΩ, -3.7 A, NL		BSR315P ³⁾ 1.3 mΩ, -0.62 A, LL	ISS17EP06LM ^{1) 3)} 2.2 Ω, -0.3 A, LL	BSS84PW ³⁾ 12 Ω, -0.15 A, LL
	ISP13DP06NMS ^{1) 2)} 125 mΩ, -2.8 A, NL			BSS83P ³⁾ 3 Ω, -0.33 A, LL	
	BSP613P ²⁾ 130 mΩ, -2.9 A, NL			ISS55EP06LM ^{1) 3)} 7 Ω, -0.18 A, LL	
	ISP25DP06NM ^{1) 2)} 250 mΩ, -1.9 A, NL			BSS84P ³⁾ 12 Ω, -0.17 A, LL	
	ISP26DP06NMS ^{1) 2)} 260 mΩ, -1.9 A, NL				
	BSP170P ²⁾ 300 mΩ, -1.9 A, NL				
	ISP25DP06LM ^{1) 3)} 310 mΩ, -1.9 A, LL				
	ISP25DP06LMS ^{1) 3)} 310 mΩ, -1.9 A, LL				
	BSP171P ³⁾ 450 mΩ, -1.9 A, LL				
	ISP75DP06LM ^{1) 3)} 1 Ω, -1.1 A, LL				
	BSP315P ³⁾ 1.4 Ω, -1.17 A, LL				

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2) $R_{DS(on)}$ specified at 10 V3) $R_{DS(on)}$ specified at 4.5 V4) $R_{DS(on)}$ specified at 2.5 V5) $R_{DS(on)}$ specified at 1.8 V6) $R_{DS(on)}$ specified at 0 V

Small Signal and Small power MOSFETs P-channel product portfolio -12 V to -40 V



Voltage	TSOP-6	SOT-23	SOT-323	SOT-363
-40 V	IRF5803 ^{1) 2)} 112 mΩ, -3.4 A, NL			
-30 V	IRF5S9342 ^{1) 2)} 40 mΩ, -5.8 A, NL	IRLML9301 ^{1) 3)} 103 mΩ, -1.3 A, LL		BSD314SPE ³⁾ 230 mΩ, -1.5 A, LL, ESD
	BSL307SP ³⁾ 74 mΩ, -5.5 A, LL	BSS308PE ³⁾ 130 mΩ, -2.1 A, LL, ESD		
	BSL308PE ³⁾ 130 mΩ, -2.1 A, LL, dual, ESD	IRLML5203 ^{1) 3)} 165 mΩ, -3.0 A, LL		
		BSS314PE ³⁾ 230 mΩ, -1.5 A, LL, ESD		
		BSS315P ³⁾ 270 mΩ, -1.5 A, LL		
		IRLML9303 ^{1) 4)} 270 mΩ, -2.3 A, LL		
		IRLML5103 ^{1) 3)} 1000mΩ, -0.76A, LL		
-20 V	BSL207SP ⁴⁾ 41 mΩ, -6.0 A, SLL	IRLML2244 ^{1) 4)} 95 mΩ, -4.3 A, LL	BSS209PW ⁴⁾ 900 mΩ, -0.58 A, SLL	BSV236SP ⁴⁾ 285 mΩ, -1.5 A, SLL
	IRLTS2242 ^{1) 4)} 55 mΩ, -6.9 A, SLL	IRLML6402 ^{1) 4)} 135 mΩ, -3.7 A, LL	BSS223PW ⁴⁾ 2.1 Ω, -0.39 A, SLL	BSD223P ⁴⁾ 2.1 Ω -0.39 A, SLL, dual
	IRLMS6802 ^{1) 4)} 100 mΩ, -5.6 A, SLL	IRLML2246 ^{1) 4)} 236 mΩ, -2.6 A, LL		
	BSL211SP ⁴⁾ 110 mΩ, -4.7 A, SLL	BSS215P ⁴⁾ 280 mΩ, -1.5 A, SLL		
	IRLMS6702 ^{1) 3)} 200 mΩ, -2.4 A, LL	IRLML6302 ^{1) 3)} 600 mΩ, -0.78 A, LL		
		IRLML6401 ^{1) 4)} 85 mΩ, -4.3 A, LL		
-12 V				

1) not qualified to Automotive AEC-Q101

2) $R_{DS(on)}$ specified at 10 V3) $R_{DS(on)}$ specified at 4.5 V4) $R_{DS(on)}$ specified at 2.5 V5) $R_{DS(on)}$ specified at 1.8 V6) $R_{DS(on)}$ specified at 0 V

Small Signal and Small power MOSFETs Complementary MOSFET product portfolio



Voltage	TSOP-6	SOT-363
-20 / 20 V	BSL215C ⁴⁾ N: 250 mΩ, 1.5 A, SLL P: 280 mΩ, -1.5 A, SLL	BSD235C ⁴⁾ N: 600 mΩ, 0.95 A, SLL P: 2.1 Ω, -0.53 A, SLL
-30 / 30 V	BSL308C ³⁾ N: 93 mΩ, 2.3 A, LL P: 130 mΩ, -2.0 A, LL BSL316C ³⁾ N: 280 mΩ, 1.4 A, LL P: 270 mΩ, -1.5 A, LL	

1) not qualified to Automotive AEC-Q101

2) $R_{DS(on)}$ specified at 10 V

3) $R_{DS(on)}$ specified at 4.5 V

4) $R_{DS(on)}$ specified at 2.5 V

5) $R_{DS(on)}$ specified at 1.8 V

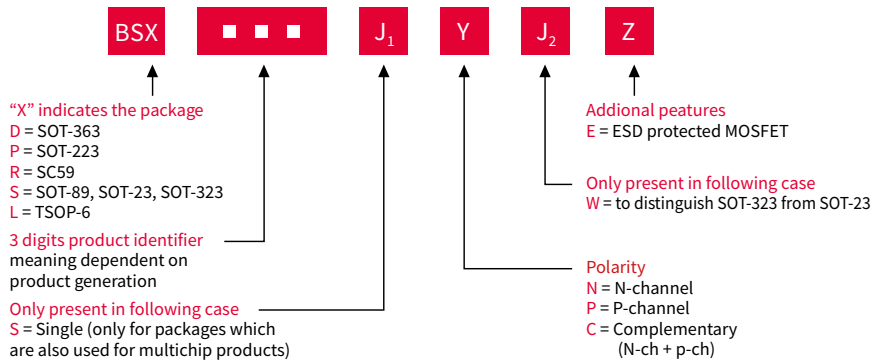
6) $R_{DS(on)}$ specified at 0 V

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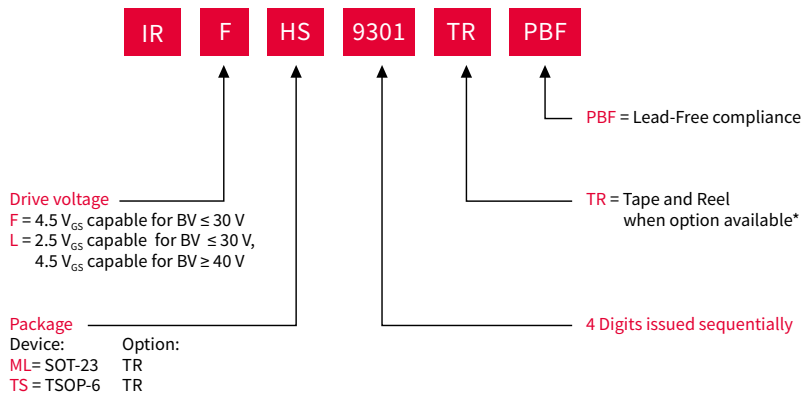
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Nomenclature

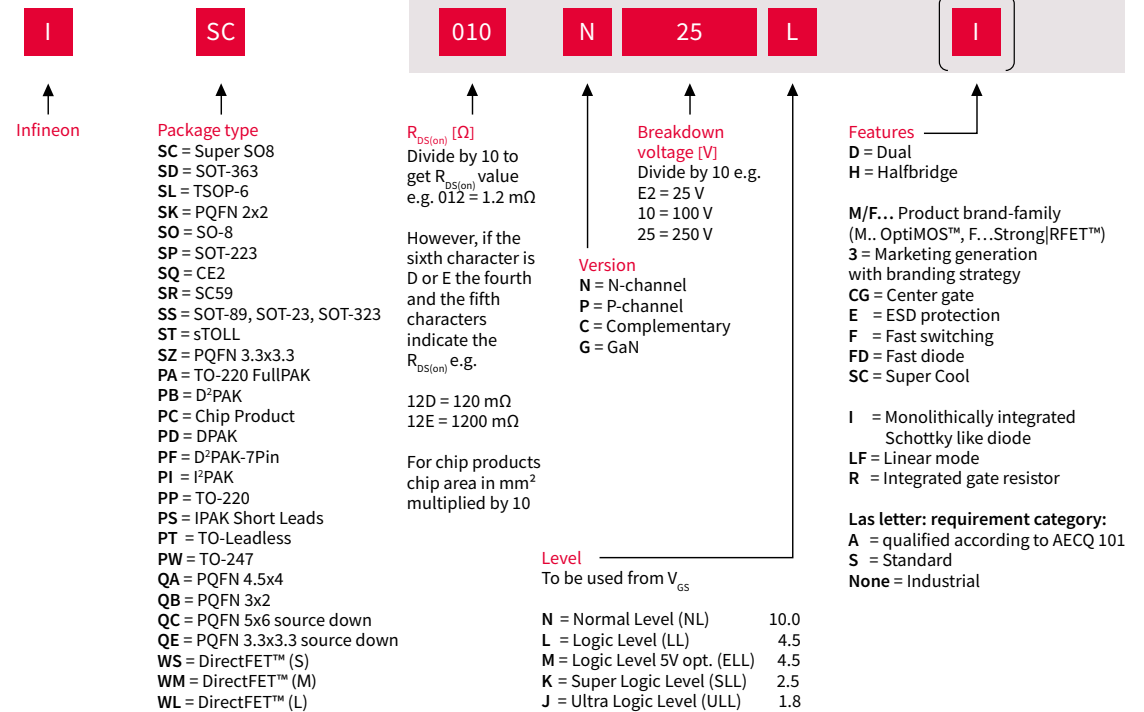
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