

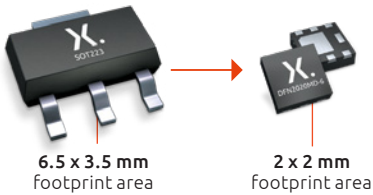


› DFN2020MD-6

Leadless package with side wettable flanks

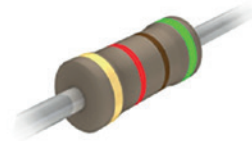
The **DFN2020MD-6** enlarges Nexperia's 175°C automotive MOSFET portfolio towards 2.0 x 2.0 mm footprint

Comparison between SOT223 and DFN2020



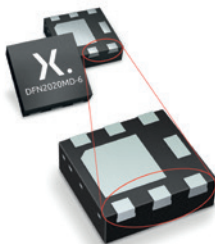
- › Ultra-compact footprint - 4 mm²
- › Ultra-low height < 0.65 mm
- › 90 % smaller than SOT223

Ultra Low On-Resistance

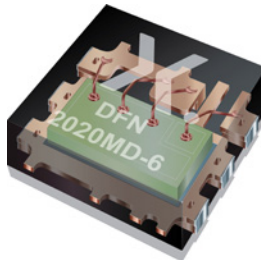


- › R_{Dson} down to 18 mΩ (@4.5V) for 40V N-ch
- › R_{Dson} down to 30 mΩ (@10V) for 40V P-ch

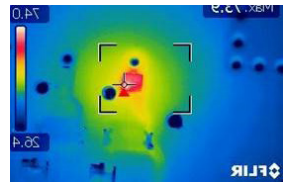
Side wettable flanks



- › High board level reliability
- › Easy optical inspection
- › Robust solder joints



High thermal capabilities



- › Low R_{th}
- › Extended temperature range
 $T_j = 175\text{ }^\circ\text{C}$
- › Exposed drain pad for excellent thermal conduction

DFN2020MD-6 automotive portfolio

Package									DFN2020MD-6 (SOT1220)
Size (mm)									2.0 x 2.0 x 0.65
P _{tot} (mW)									1250
Pol.	V _{DS}	V _{GS}	I _D	V _{GStH}	V _{GStH}	ESD	R _{DSon} typ (mΩ) @ V _{GS} =		Type number
	(V)	(V)	(A)	min (V)	max (V)	(kV)	10 V	4.5 V	
N	20	12	12.9	0.4	0.9	2	-	10	PMPB10XNEA
			11.4	0.4	0.9	2	-	12	PMPB12UNEA
			6.3	0.75	1.25	2	-	16	PMPB20XNEA
	30	12	11.3	0.4	0.9	2	-	13	PMPB13XNEA
			5	0.4	0.9	2	-	28	PMPB29XNEA
	40	15	7	1	2	-	-	18	BUK9D23-40E
		20	7	1.3	2.7	-	19	24	BUK6D23-40E
		20	7	2.4	4	-	19	-	BUK7D25-40E
	60	20	5	1.3	2.7	-	32	38	BUK6D43-60E
			4	1.3	2.7	2	42	49	PMPB55ENEAE
			3	1.3	2.7	2	72	85	PMPB85ENEAE
	80	20	2.8	1.3	2.7	2	80	92	PMPB95ENEAE
	80	20	1.9	1.3	2.7	2	175	195	PMPB215ENEAE
	100	20	1.5	1.3	2.7	2	285	301	PMPB280ENEAE
P	12	12	11.8	0.47	0.9	-	-	15	PMPB15XPA
	20	12	10.3	0.47	0.9	2	-	19	PMPB20XPEA
			5	0.47	0.9	2	-	28	PMPB29XPEA
			5	0.47	0.9	2	-	39	PMPB43XPEA
	30	12	5	0.47	0.9	-	-	47	PMPB47XPA
		20	8.8	1	2.5	-	24	32	PMPB27EPA
				6.8	1	2.5	-	40	55
	40	20	6	1.4	2.7	-	30	45	BUK6D43-40P
60	20	3	1.9	3.2	-	98	124	BUK6D120-60P	

Types in bold are qualified to 175°C

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