

**Vanguard Semiconductor Power MOSFET Products Selection Guide**

May-2015

NO.	Part ID	Type	ESD	BVDSS [V]	BVGS [V]	VTH [V]	ID [A]	RDON[mohm] Typ * @Vgs=				Package Type	Production Status
								10V	4.5V	2.5V	1.8V		
NMOS+PMOS Serial													
1	VS4606AS	NMOS	NO	30	±12	0.6~1.2	6	--	30	40	--	SOP8	Full production
		PMOS	NO	-30	±12	-0.4~-1.2	-5.2	--	55	65	--		
2	VS4620MS	NMOS	NO	30	±20	1.0~2.0	6.8	22	28	--	--	SOP8	Full production
		PMOS	NO	-30	±20	-1.0~-2.5	-6.0	32	42	--	--		
3	VS4616MS	NMOS	NO	30	±20	1.0~2.0	7	19	28	--	--	SOP8	Full production
		PMOS	NO	-30	±20	-1.0~-2.5	-7	19	28	--	--		
4	VS4503AS	NMOS	NO	30	±20	1.0~2.0	8	18	25	--	--	SOP8	Full production
		PMOS	NO	-30	±20	-1.0~-2.0	-7.8	20	28	--	--		
5	VS4503AP	NMOS	NO	30	±20	1.0~3.0	8	14	18	--	--	PDFN5x6	Full production
		PMOS	NO	-30	±20	-1.0~-3.0	-7.8	18	28	--	--		
6	VS4559MS	NMOS	NO	60	±20	1.0~3.0	8	45	55	--	--	SOP8	Full production
		PMOS	NO	-60	±20	-1.0~-3.0	-7.5	75	95	--	--		
Dual PMOS Serial													
7	VS6401AH	Dual-P	NO	-30	±12	-0.5~-1.5	-4.2	45	60	85	--	SOT23-6L	Full production
8	VS4801DS	Dual-P	NO	-30	±12	-0.4~-1.8	-4.2	45	55	65	--	SOP8	Full production
9	VS6801AH	Dual-P	NO	-30	±12	-0.6~-1.4	-2.8	100	120	180	--	SOT23-6L	Full production
10	VS4953AS	Dual-P	NO	-30	±20	-0.9~-2.0	-4.9	52	72	--	--	SOP8	Full production
11	VS4805DS	Dual-P	NO	-30	±20	-1.0~-2.5	-8	18	28	--	--	SOP8	Full production
12	VS4807DS	Dual-P	NO	-30	±20	-1.0~-2.5	-6.0	32	45	--	--	SOP8	Full production
13	VS60P15DP	Dual-P	NO	-60	±20	-1.0~-3.0	-15	75	--	--	--	PDFN5x6	Full production
PMOS Serial													
14	VS2301AC	PMOS	NO	-20	±12	-0.4~-1.0	-3.0	--	60	80	--	SOT-23	Full production
15	VS2301AL	PMOS	NO	-20	±12	0.5~-1.5	-2.3	--	55	85	--	SOT23-3L	Full production
16	VS2301BC	PMOS	NO	-20	±12	0.6~-1.5	-1.8	--	95	130	--	SOT-23	Full production
17	VS3415AC	PMOS	YES	-20	±8	-0.4~-1.0	-5	--	30	40	60	SOT-23	Full production
18	VS3415AL	PMOS	YES	-20	±8	-0.4~-1.0	-5	--	30	40	60	SOT23-3L	Full production
19	VS2401AC	PMOS	YES	-30	±8	-0.4~-1.0	-3.5	--	45	60	105	SOT-23	Full production
20	VS2401AL	PMOS	YES	-30	±8	-0.4~-1.0	-3.5	--	45	60	105	SOT23-3L	Full production
21	VS3401BC	PMOS	NO	-30	±12	-0.5~-1.5	-4.2	55	65	85	--	SOT-23	Full production
22	VS3401BL	PMOS	NO	-30	±12	-0.5~-1.5	-4.2	45	55	65	--	SOT23-3L	Full production
23	VS3407AC	PMOS	NO	-30	±12	-1.0~-2.0	-4.3	55	70	--	--	SOT-23	Full production
24	VS3403AC	PMOS	NO	-30	±12	-0.6~-1.5	-2.8	85	100	145	--	SOT-23	Full production
25	VS9435AS	PMOS	NO	-30	±20	-0.9~-2.0	-4.9	52	72	--	--	SOP8	Full production
26	VS4449AS	PMOS	NO	-30	±20	-1.0~-2.5	-6	30	40	--	--	SOP8	Full production
27	VS4435AS	PMOS	NO	-30	±20	-1.0~-2.0	-7.8	18	25	--	--	SOP8	Full production
28	VS4407AS	PMOS	NO	-30	±20	-1.0~-2.5	-13	11	16	--	--	SOP8	Full production
29	VS30P39AE	PMOS	NO	-30	±20	-1.0~-2.0	-39	9.5	14	--	--	PDFN3X3	Full production
30	VS30P60AD	PMOS	NO	-30	±20	-1.0~-2.0	-60	12	18	--	--	TO-252	Full production
31	VS30P90AD	PMOS	NO	-30	±20	-1.0~-2.5	-90	4.2	6	--	--	TO-252	Full production
32	VS30P90AT	PMOS	NO	-30	±20	-1.0~-2.5	-90	4.2	6	--	--	TO-220AB	Full production
33	VSO026P04MS	PMOS	NO	-40	±20	-1.0~-3.0	-35	20	23	--	--	SOP8	Full production
34	VS40P35AD	PMOS	NO	-40	±20	-1.0~-2.5	-35	20	22	--	--	TO-252	Full production
35	VS60P15AD	PMOS	NO	-60	±20	-1.0~-3.0	-15	75	80	--	--	TO-252	Full production
36	VS60P15AI	PMOS	NO	-60	±20	-1.0~-3.0	-15	75	80	--	--	TO-251	Full production
37	VS1HP02AZ	PMOS	NO	-100	±20	-1.0~-3.0	-2	420	550	--	--	SOT-223	Full production
38	VS3P10AL	PMOS	NO	-100	±20	-1.0~-3.0	-1.6	420	550	--	--	SOT23-3L	Full production
39	VS8P10AD	PMOS	NO	-100	±20	-1.0~-3.0	-3	400	530	--	--	TO-252	Full production
40	VS25P10AD	PMOS	NO	-100	±20	-1.0~-2.5	-25	40	45	--	--	TO-252	Full production

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								10V	4.5V	2.5V	1.8V		
Dual NMOS Serial													
41	VS2025AH	Dual-N	NO	20	±12	0.4~1.0	6	--	22	28	36	SOT23-6L	Full production
42	VS2025ATS	Dual-N	NO	20	±12	0.4~1.2	6	--	25	32	36	TSSOP8	Full production
43	VS2016ATS	Dual-N	YES	20	±10	0.4~1.0	6.8	--	16	19	23	TSSOP8	Full production
44	VS2018AH	Dual-N	NO	20	±10	0.4~1.0	5.2	--	18	23	29	SOT23-6L	Full production
45	VS2018ATS	Dual-N	NO	20	±12	0.4~1.2	6.5	--	19	24	30	TSSOP8	Full production
46	VS6808AH	Dual-N	YES	20	±10	0.4~1.0	6	--	15	18	22	SOT23-6L	Full production
47	VS8810BTS	Dual-N	YES	20	±12	0.4~1.2	7	--	15	18	23	TSSOP8	Full production
48	VS2008ATS	Dual-N	NO	20	±10	0.4~1.0	8	--	10	12	14	TSSOP8	Full production
49	VS3009DS	Dual-N	NO	30	±20	1.0~2.5	8	16	24	--	--	SOP8	Full production
50	VS4812DS	Dual-N	NO	30	±20	1.0~2.5	6	23	32	--	--	SOP8	Full production
51	VS1H03DS	Dual-N	YES	100	±16	1.0~3.0	6	160	180	--	--	SOP8	Full production
52	VS1H08DP	Dual-N	YES	100	±16	1.0~2.5	8	85	95	--	--	PDFN5x6	Full production
NMOS Serial													
53	VS2300AC	NMOS	NO	20	±12	0.5~1.5	5.2	--	25	32	--	SOT-23	Full production
54	VS2300AL	NMOS	NO	20	±12	0.5~1.5	5.2	--	25	32	--	SOT23-3L	Full production
55	VS2302AC	NMOS	NO	20	±12	0.4~1.0	3.2	--	32	40	--	SOT-23	Full production
56	VS2302AL	NMOS	NO	20	±12	0.4~1.0	3.2	--	32	40	--	SOT23-3L	Full production
57	VS3416AL	NMOS	YES	20	±10	0.4~1.0	6.5	--	15	18	22	SOT23-3L	Full production
58	VS2018AC	NMOS	NO	20	±12	0.5~1.0	6	--	20	23	30	SOT-23	Full production
59	VS2018AL	NMOS	NO	20	±12	0.5~1.0	6	--	20	23	30	SOT23-3L	Full production
60	VS3416AC	NMOS	YES	20	±12	0.4~1.0	6.8	--	16	19	23	SOT-23	Full production
61	VS2598AD	NMOS	NO	25	±12	0.6~1.2	90	5.5	5.8	6.8	--	TO-252	Full production
62	VS2598AI	NMOS	NO	25	±12	0.6~1.2	90	5.5	5.8	6.8	--	TO-251	Full production
63	VS2598AP	NMOS	NO	25	±20	0.4~1.2	30	4.3	4.8	5.6	--	PDFN5x6	Full production
64	VS3400BC	NMOS	NO	30	±12	0.6~1.3	5.8	25	32	--	--	SOT-23	Full production
65	VS3400BL	NMOS	NO	30	±12	0.6~1.3	5.8	25	26	38	--	SOT23-3L	Full production
66	VS3402AC	NMOS	NO	30	±12	0.6~1.2	4.2	40	45	55	--	SOT-23	Coming soon
67	VS3402AL	NMOS	NO	30	±12	0.6~1.2	4.2	40	45	55	--	SOT23-3L	Coming soon
68	VS3404AC	NMOS	NO	30	±20	1.0~2.5	5.8	24	34	--	--	SOT-23	Full production
69	VS3010AS	NMOS	NO	30	±20	1.0~3.0	8	14	16	--	--	SOP8	Coming soon
70	VS4466AS	NMOS	NO	30	±20	1.0~2.5	6	20	30	--	--	SOP8	Full production
71	VS3019AD	NMOS	NO	30	±12	0.5~1.5	19	25	30	35	--	TO-252	Full production
72	VS3019AI	NMOS	NO	30	±12	0.6~1.8	10	25	28	--	--	TO-251	Full production
73	VS3060AS	NMOS	NO	30	±20	1.0~3.0	20	9	12	--	--	SOP8	Full production
74	VS3038AI	NMOS	NO	30	±20	0.9~2.0	30	14	24	--	--	TO-251	Full production
75	VS3038AD	NMOS	NO	30	±20	0.9~2.0	40	14	24	--	--	TO-252	Full production
76	VS3060AD	NMOS	NO	30	±20	1.0~3.0	60	9	12	--	--	TO-252	Full production
77	VS3080AD	NMOS	NO	30	±20	0.6~1.8	90	4	5	--	--	TO-252	Full production
78	VS3080AI	NMOS	NO	30	±20	0.8~2.0	90	4	5	6.8	--	TO-251	Full production
79	VS3080AP	NMOS	NO	30	±20	1.2~2.8	90	4	5	--	--	PDFN5x6	Full production
80	VS3098AT	NMOS	NO	30	±20	0.8~2.0	98	4	4.8	6.5	--	TO-220AB	Full production
81	VS30160AP	NMOS	NO	30	±20	1.2~2.8	120	2.3	3.3	--	--	PDFN5x6	Full production
82	VS30160AD	NMOS	NO	30	±20	1.2~2.8	120	2.3	3.4	--	--	TO-252	Full production
83	VS30160AT	NMOS	NO	30	±20	1.0~3.0	160	2.8	3.4	--	--	TO-220AB	Full production
84	VS30160ATD	NMOS	NO	30	±20	1.0~3.0	160	2.8	3.5	--	--	TO-263	Full production
85	VS30200AT	NMOS	NO	30	±20	0.8~1.8	150	2.5	3	--	--	TO-220AB	Full production
86	VS30200ATD	NMOS	NO	30	±20	0.8~1.8	150	2.2	2.8	--	--	TO-263	Full production
87	VS30200AP	NMOS	NO	30	±20	0.8~2.0	150	2.3	3.3	--	--	PDFN5x6	Full production
88	VS30200AD	NMOS	NO	30	±20	0.8~1.8	150	2.5	3	--	--	TO-252	Full production

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89	VS4020AS	NMOS	NO	40	±20	1.0~2.5	18	6	7.5	--	--	SOP8	Full production
90	VS4080AD	NMOS	NO	40	±20	1.0~2.5	80	5	6	--	--	TO-252	Full production
91	VS4080AI	NMOS	NO	40	±20	1.0~2.5	80	5	6	--	--	TO-251	Full production
92	VS4020AP	NMOS	NO	40	±20	1.0~2.5	60	4	5.5	--	--	PDFN5x6	Full production
93	VS40200AP	NMOS	NO	40	±20	1.2~2.8	120	2.4	3.4	--	--	PDFN5x6	Full production
94	VS40200AD	NMOS	NO	40	±20	1.2~2.8	120	2.4	3.4	--	--	TO-252	Full production
95	VS40200AT	NMOS	NO	40	±20	1.0~3.0	200	3	--	--	--	TO-220AB	Full production
96	VS40200ATD	NMOS	NO	40	±20	1.0~3.0	200	3	--	--	--	TO-263	Full production
97	VS40280AT	NMOS	NO	40	±20	1.0~3.0	280	1.8	--	--	--	TO-220AB	Full production
98	VS40280ADT	NMOS	NO	40	±20	1.0~3.0	280	1.8	2.2	--	--	TO-247	Full production
99	VS40230AT	NMOS	NO	40	±20	2.2~3.9	230	2.2	--	--	--	TO-220AB	Full production
100	VS40300AT	NMOS	NO	40	±20	2.0~4.0	300	1.9	--	--	--	TO-220AB	Full production
101	VS0306BC	NMOS	NO	60	±20	0.6~1.8	3	75	85	--	--	SOT-23	Full production
102	VS0306BL	NMOS	NO	60	±20	0.6~1.8	3	75	85	--	--	SOT23-3L	Full production
103	VS6006AL	NMOS	NO	60	±20	1.0~3.0	5	45	50	--	--	SOT23-3L	Coming soon
104	VS6016AS	NMOS	NO	55	±25	1.0~2.5	16	10	12	--	--	SOP8	Full production
105	VS6026AD	NMOS	NO	60	±20	1.0~3.0	16	80	100	--	--	TO-252	Full production
106	VS6038BI	NMOS	Yes	60	±20	1.0~3.0	25	55	65	--	--	TO-251	Full production
107	VS6038BD	NMOS	Yes	60	±20	1.0~3.0	25	45	--	--	--	TO-252	Full production
108	VS6052AI	NMOS	NO	55	±25	1.0~2.5	52	10	12	--	--	TO-251	Full production
109	VS6052AD	NMOS	NO	55	±25	1.0~2.5	52	10	12	--	--	TO-252	Full production
110	VS6050AD	NMOS	NO	60	±20	2.0~4.0	50	10	--	--	--	TO-252	Full production
111	VS6050AT	NMOS	NO	60	±20	2.0~4.0	50	10	--	--	--	TO-220AB	Full production
112	VS6030AP	NMOS	NO	60	±20	1.0~3.0	50	6.5	7.5	--	--	PDFN5x6	Full production
113	VS6070AD	NMOS	NO	60	±20	2.0~4.0	70	6.5	--	--	--	TO-252	Full production
114	VS6085AI	NMOS	NO	60	±20	1.0~3.0	85	6.5	7.5	--	--	TO-251	Full production
115	VS6085AD	NMOS	NO	60	±20	1.0~3.0	85	6.5	7.5	--	--	TO-252	Full production
116	VS6880AD	NMOS	NO	60	±25	2.0~4.0	70	6.5	--	--	--	TO-252	Full production
117	VS6080AT	NMOS	NO	60	±20	2.0~4.0	80	6.5	--	--	--	TO-220AB	Full production
118	VS6080ATD	NMOS	NO	60	±25	2.0~4.0	100	6.5	--	--	--	TO-263	Full production
119	VS3206AT	NMOS	NO	60	±20	2.0~4.0	210	2.6	--	--	--	TO-220AB	Full production
120	VS3206ADT	NMOS	NO	60	±20	2.0~4.0	210	2.6	--	--	--	TO-247	Full production
121	VS6888AT	NMOS	NO	65	±20	2.0~4.0	88	6	--	--	--	TO-220AB	Full production
122	VS6888ATD	NMOS	NO	65	±20	2.0~4.0	88	6	--	--	--	TO-263	Full production
123	VS6888AP	NMOS	NO	60	±20	2.0~4.0	88	6.5	--	--	--	PDFN5x6	Full production
124	VS7080AT	NMOS	NO	70	±20	2.0~4.0	100	6.5	--	--	--	TO-220AB	Full production
125	VS7580AT	NMOS	NO	75	±20	2.0~4.0	83	6.5	--	--	--	TO-220AB	Full production
126	VS7085AT	NMOS	NO	70	±20	2.0~4.0	90	5.5	--	--	--	TO-220AB	Full production
127	VS80110AT	NMOS	NO	80	±20	2.0~4.0	110	5.5	--	--	--	TO-220AB	Full production
128	VS80110ATD	NMOS	NO	80	±20	2.0~4.0	110	5.5	--	--	--	TO-263	Full production
129	VS8066ATD	NMOS	NO	80	±20	2.0~4.0	66	9	--	--	--	TO-263	Full production
130	VS8066AT	NMOS	NO	80	±20	2.0~4.0	66	9	--	--	--	TO-220AB	Full production
131	VS8066AD	NMOS	NO	80	±20	2.0~4.0	66	9	--	--	--	TO-252	Full production
132	VS80N08AT	NMOS	NO	80	±20	2.0~4.0	83	8	--	--	--	TO-220AB	Full production
133	VS80N08ATD	NMOS	NO	80	±20	2.0~4.0	83	8	--	--	--	TO-263	Full production
134	VS3107AT	NMOS	NO	80	±25	2.0~4.0	190	3	--	--	--	TO-220AB	Full production
135	VS3107ATD	NMOS	NO	80	±20	2.0~4.0	190	3	--	--	--	TO-263	Full production
136	VS3207AT	NMOS	NO	80	±20	2.0~4.0	180	3.6	--	--	--	TO-220AB	Full production
137	VS3207ADT	NMOS	NO	80	±20	2.0~4.0	180	3.6	--	--	--	TO-247	Full production
138	VS150N08AT	NMOS	NO	80	±20	2.0~4.0	150	4.8	--	--	--	TO-220AB	Full production

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								10V	4.5V	2.5V	1.8V		
139	VS150N08ATD	NMOS	NO	80	±20	2.0~4.0	150	4.8	--	--	--	TO-263	Full production
140	VS1H05AR	NMOS	NO	100	±20	1.0~3.0	5	130	150	--	--	SOT89	Full production
141	VS3N10AL	NMOS	NO	100	±20	1.0~3.0	3	120	150	--	--	SOT23-3L	Full production
142	VS1H03AL	NMOS	YES	100	±16	1.0~3.0	2.8	160	180	--	--	SOT23-3L	Full production
143	VS1H06AS	NMOS	YES	100	±16	1.0~3.0	6	85	95	--	--	SOP8	Full production
144	VS13N10AD	NMOS	NO	100	±20	1.0~3.0	10	190	210	--	--	TO-252	Full production
145	VS1H12AS	NMOS	NO	100	±20	1.0~3.0	7	32	35	--	--	SOP8	Full production
146	VS1H16AS	NMOS	NO	100	±20	1.0~3.0	8.2	21	22	--	--	SOP8	Full production
147	VS1H15AF	NMOS	YES	100	±16	1.0~2.5	15	85	95	--	--	TO-220FS	Full production
148	VS1H15AD	NMOS	YES	100	±16	1.0~2.5	15	85	95	--	--	TO-252	Full production
149	VS1H41AI	NMOS	NO	100	±25	1.0~3.0	36	22	24	--	--	TO-251	Full production
150	VS1H41AD	NMOS	NO	100	±20	1.0~3.0	41	21	22	--	--	TO-252	Full production
151	VS1H43AI	NMOS	NO	100	±25	1.0~3.0	43	18	20	--	--	TO-251	Full production
152	VS1H43AD	NMOS	NO	100	±25	1.0~3.0	43	18	20	--	--	TO-252	Full production
153	VS1H48AI	NMOS	NO	100	±25	1.0~3.0	48	14	15	--	--	TO-251	Full production
154	VS1H48AD	NMOS	NO	100	±25	1.0~3.0	48	14	15	--	--	TO-252	Full production
155	VS3710AT	NMOS	NO	100	±25	2.0~4.0	60	13.5	--	--	--	TO-220AB	Full production
156	VS3710ADT	NMOS	NO	100	±25	2.0~4.0	60	13.5	--	--	--	TO-247	Full production
157	VS3710ATD	NMOS	NO	100	±25	2.0~4.0	60	13.5	--	--	--	TO-263	Full production
158	VS4310AT	NMOS	NO	100	±20	2.0~4.0	130	5.5	--	--	--	TO-220AB	Full production
159	VS4310ATD	NMOS	NO	100	±20	2.0~4.0	130	5.5	--	--	--	TO-247	Full production
160	VS4110ADT	NMOS	NO	100	±20	2.0~4.0	180	4.5	--	--	--	TO-247	Full production
161	VS4110AT	NMOS	NO	100	±20	2.0~4.0	180	4.5	--	--	--	TO-220AB	Full production
162	VS4110ATD	NMOS	NO	100	±25	2.0~4.0	180	4.5	--	--	--	TO-263	Full production
163	VS4410AT	NMOS	NO	100	±20	2.0~4.0	110	6.5	--	--	--	TO-247	Full production
164	VS4410ATD	NMOS	NO	100	±20	2.0~4.0	110	6	--	--	--	TO-263	Full production
165	VS40N10AD	NMOS	NO	100	±20	1.0~3.0	28	32	--	--	--	TO-252	Full production
166	VS35N10AT	NMOS	NO	100	±20	2.0~4.0	28	32	--	--	--	TO-220AB	Full production
167	VSD260N15MS	NMOS	NO	150	±20	1.0~3.0	5	190	210	--	--	TO-252	Full production
168	VSD500N15MS	NMOS	NO	150	±20	1.0~3.0	3	430	450	--	--	TO-252	Full production
169	VSL500N15MS	NMOS	NO	150	±20	1.0~3.0	2	400	420	--	--	SOT23-3L	Full production
170	VSL01RN20MS	NMOS	NO	200	±30	1.0~3.0	1.5	1000	--	--	--	SOT23-3L	Coming soon
171	VSO01RN20MS	NMOS	NO	200	±30	1.0~3.0	1.5	1000	--	--	--	SOP8	Coming soon
172	VSZ01RN20MS	NMOS	NO	200	±30	1.0~3.0	1.5	1000	--	--	--	SOT223	Coming soon
173	VS20N20AD	NMOS	NO	200	±20	2.0~4.0	20	75	--	--	--	TO-252	Full production
174	VS20N20ATD	NMOS	NO	200	±20	2.0~4.0	20	75	--	--	--	TO-263	Full production
175	VS830HD	NMOS	NO	500	±30	2.0~4.0	4.5	1000	--	--	--	TO-252	Full production
176	VS830HI	NMOS	NO	500	±30	2.0~4.0	4.5	1000	--	--	--	TO-251	Full production

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