

# TEXAS INSTRUMENTS Power MOSFET Transistors



RoHS Compliant This product is RoHS compliant.

MOSFETS

Texas Instruments

## N-CHANNEL NEXFET™ MOSFETS

NexFET™ power MOSFET technology delivers half the gate charge for the same resistance so that designers can achieve 90% power-supply efficiencies with double the frequency. NexFET™ power MOSFET technology improves energy efficiency in high-power computing, networking, server systems and power supplies.

### ◆ Surface Mount Device



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Texas Instruments Part No.	Package	V <sub>DS</sub> (Max) (V)	I <sub>D</sub> (Max) (A)	I <sub>DM</sub> (Max) (A)	R <sub>DS(on)</sub> (Max)(Ω) @				V <sub>GS</sub> (Max) (V)	Q <sub>g</sub> (Typ) (nC)	Q <sub>gd</sub> (Typ) (nC)	P <sub>D</sub> (Max) (W)	Price Each			
						V <sub>GS</sub> =10V	V <sub>GS</sub> =8.0V	V <sub>GS</sub> =4.5V	V <sub>GS</sub> =3.0V					1	25	100	250
<b>Single</b>																	
◆ 595-CSD16301Q2	CSD16301Q2	SON-6	25	5	20	-	24	29	34	+10/-8	2.0	0.4	2.3	.58	.457	.403	.304
◆ 595-CSD16411Q3	CSD16411Q3	SON-8	25	56	138	10	-	15	-	+16/-12	2.9	0.7	2.7	.99	.783	.707	.638
◆ 595-CSD16327Q3	CSD16327Q3	SON-8	25	60	112	-	3.4	-	5	+10/-8	6.2	1.1	3.0	1.37	1.17	.975	.585
◆ 595-CSD16406Q3	CSD16406Q3	SON-8	25	60	114	5.3	-	7.4	-	+16/-12	5.8	1.5	2.7	1.29	1.02	.915	.864
◆ 595-CSD16409Q3	CSD16409Q3	SON-8	25	60	90	8.2	-	12.4	-	+16/-12	4.0	1.0	2.6	1.10	.871	.788	.742
◆ 595-CSD16340Q3	CSD16340Q3	SON-8	25	60	115	-	4.5	5.5	7.8	+10/-8	6.5	1.2	3.0	1.11	.88	.792	.746
◆ 595-CSD16342Q5A	CSD16342Q5A	SON-8	25	100	131	-	-	0.0038	0.0043	+10/-8	6.8	1.2	3.0	1.47	1.26	1.05	.63
◆ 595-CSD16404Q5A	CSD16404Q5A	SON-8	25	81	135	5.1	-	7.2	-	+16/-12	6.5	1.7	3.0	1.46	1.15	1.03	.904
◆ 595-CSD16415Q5	CSD16415Q5	SON-8	25	100	200	0.99	-	1.5	-	+16/-12	21.0	5.2	3.2	2.63	2.10	1.68	1.40
◆ 595-CSD16401Q5	CSD16401Q5	SON-8	25	100	240	1.6	-	2.3	-	+16/-12	21.0	5.2	3.1	2.93	2.25	2.04	1.83
◆ 595-CSD16414Q5	CSD16414Q5	SON-8	25	100	213	1.9	-	2.6	-	+16/-12	16.6	4.4	3.2	2.31	1.77	1.61	1.45
◆ 595-CSD16413Q5A	CSD16413Q5A	SON-8	25	100	156	3.9	-	5.6	-	+16/-12	9.0	2.5	3.1	1.47	1.16	1.04	.986
◆ 595-CSD16325Q5	CSD16325Q5	SON-8	25	100	200	-	2.0	2.2	2.9	+10/-8	18.0	3.5	3.1	2.31	1.77	1.61	1.45
◆ 595-CSD17313Q2	CSD17313Q2	SON-6	30	5	20	-	-	30	42	+10/-8	2.1	0.4	2.3	.58	.457	.403	.304
◆ 595-CSD17304Q3	CSD17304Q3	SON-8	30	56	88	-	0.075	0.088	-	+10/-8	5.1	1.1	2.7	1.46	1.14	1.02	.972
◆ 595-CSD17309Q3	CSD17309Q3	SON-8	30	60	112	-	0.054	0.063	-	+10/-8	7.5	1.7	2.8	1.46	1.12	1.02	.915
◆ 595-CSD17507Q5A	CSD17507Q5A	SON-8	30	65	85	9	-	11.8	-	+20/-12	2.8	0.7	3.0	.99	.783	.707	.638
◆ 595-CSD17551Q3A	CSD17551Q3A	SON-6	30	71	71	0.009	-	0.0118	-	20	6	1.5	2.6	.74	.67	.588	.516
◆ 595-CSD17307Q5A	CSD17307Q5A	SON-8	30	73	92	-	10.5	12.1	17.3	+10/-8	4.0	1.0	3.0	.99	.783	.707	.638
◆ 595-CSD17551Q5A	CSD17551Q5A	SON-8	30	85	48	8.8	-	11	-	20	6.0	1.4	3.0	.75	.65	.591	.52
◆ 595-CSD17301Q5A	CSD17301Q5A	SON-8	30	100	118	-	2.6	3.0	3.7	+10/-8	19.0	4.3	3.2	1.84	1.42	1.29	1.16
◆ 595-CSD17510Q5A	CSD17510Q5A	SON-8	30	100	129	4.1	-	5.4	-	+20/-12	6.4	1.9	3.0	1.46	1.15	1.03	.904
◆ 595-CSD17310Q5A	CSD17310Q5A	SON-8	30	100	134	-	-	5.1	5.9	+10/-8	8.9	0.8	3.1	1.28	1.01	.906	.857
◆ 595-CSD17505Q5A	CSD17505Q5A	SON-8	30	100	153	0.0035	0.0046	-	-	+20/-12	10.0	2.7	3.2	1.87	1.47	1.32	1.15
◆ 595-CSD17306Q5A	CSD17306Q5A	SON-8	30	100	155	-	-	3.7	4.2	+10/-8	11.8	2.4	3.2	1.47	1.16	1.04	.986
◆ 595-CSD17305Q5A	CSD17305Q5A	SON-8	30	100	181	-	-	3.4	3.6	+10/-8	14.1	3.0	3.1	1.64	1.29	1.16	1.09
◆ 595-CSD17303Q5	CSD17303Q5	SON-8	30	100	200	-	-	2.4	2.6	+10/-8	18.0	4.0	3.2	2.39	1.83	1.67	1.49
◆ 595-CSD17311Q5	CSD17311Q5	SON-8	30	100	200	-	-	1.3	1.8	+10/-8	24.0	5.2	3.2	2.31	1.77	1.61	1.45
◆ 595-CSD17312Q5	CSD17312Q5	SON-8	30	100	200	-	-	1.2	1.4	+10/-8	28.0	6.0	3.2	2.93	2.25	2.04	1.83
◆ 595-CSD17553Q5A	CSD17553Q5A	SON-6	30	151	23.5	0.0027	-	0.0035	-	20	17.5	4.7	3.1	1.04	.90	.818	.72
◆ 595-CSD18502KCS	CSD18502KCS	TO-220	40	100	211	-	-	0.0043	-	20	52	8.4	216	2.42	2.18	1.99	1.80
◆ 595-CSD18501Q5A	CSD18501Q5A	SON-6	40	155	22	3.2	-	4.3	-	20	40.0	5.9	3.1	2.00	1.80	1.64	1.48
◆ 595-CSD18503Q5A	CSD18503Q5A	SON-6	40	145	19	4.3	-	6.2	-	20	26.0	4.9	3.1	1.62	1.46	1.33	1.20
◆ 595-CSD18504Q5A	CSD18504Q5A	SON-6	40	78	16	6.6	-	9.8	-	20	16.0	2.4	3.1	1.25	1.13	1.02	.926
◆ 595-CSD1853Q5A	CSD1853Q5A	SON-8	60	100	107	0.0059	-	0.0085	-	20	29	5.4	3.2	1.58	1.42	1.29	1.17
◆ 595-CSD18534KCS	CSD18534KCS	TO-220	60	100	108	-	-	0.0133	-	20	19	3.1	98	1.45	1.31	1.19	1.07
◆ 595-CSD18532KCS	CSD18532KCS	TO-220	60	100	179	0.0033	-	0.0043	-	20	44	6.9	216	2.42	2.18	1.99	1.80
◆ 595-CSD18533KCS	CSD18533KCS	TO-220	60	114	135	0.0063	-	0.009	-	20	28	3.9	160	1.78	1.60	1.45	1.31
◆ 595-CSD18531Q5A	CSD18531Q5A	SON-6	60	134	19	4.6	-	5.8	-	20	36.0	5.9	3.1	2.00	1.80	1.64	1.48

<b>Dual</b>																	
MOUSER STOCK NO.	Texas Instruments Part No.	Package	V <sub>DS</sub> (Max) (V)	I <sub>D</sub> (Max) (A)	I <sub>DM</sub> (Max) (A)	R <sub>DS(on)</sub> (Max)(Ω) @				V <sub>GS</sub> (Max) (V)	Q <sub>g</sub> (Typ) (nC)	Q <sub>gd</sub> (Typ) (nC)	P <sub>D</sub> (Max) (W)	Price Each			
						V <sub>GS</sub> =10V	V <sub>GS</sub> =8.0V	V <sub>GS</sub> =4.5V	V <sub>GS</sub> =3.0V					1	25	100	250
◆ 595-CSD86330Q3D	CSD86330Q3D	SON-8	25/25	20	60	-	0.0096/0.0052	0.0115/0.006	-	10	4.8/9.2	0.9/-1.6	6	2.63	2.02	1.83	1.65
◆ 595-CSD86350Q5D	CSD86350Q5D	SON-8	25/25	-120	-	-	0.006/0.0025	0.0066/0.0027	-	+10/-8	10.7/25	1/2.5	13	3.15	2.57	2.31	2.10
◆ 595-CSD87352Q5D	CSD87352Q5D	SON-8	30/30	25	-	-	-	-	-	8	4.6/10.4	0.9/1.9	8.5	2.50	2.00	1.60	1.33
◆ 595-CSD87351Q5D	CSD87351Q5D	SON-8	30/30	32	96	-	0.0076/0.0026	0.0088/0.0031	-	10	5.9/17	1/1.3	12	3.22	2.56	2.32	2.09
◆ 595-CSD87350Q5D	CSD87350Q5D	SON-8	30/30	40	120	-	0.0059/0.0025	0.0068/0.0028	-	10	8.4/20	1.6/3.6	12	3.15	2.57	2.31	2.10

◆ 595-CSD86330EVM-717 Evaluation module for the CSD86330 Synchronous Buck NexFET™ Power Block MOSFET Pair Price Each 55.28

## DUALCOOL™ N-CHANNEL NEXFET™ MOSFETS

### ◆ Surface Mount Device

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						V <sub>GS</sub> =10V	V <sub>GS</sub> =8.0V	V <sub>GS</sub> =4.5V	V <sub>GS</sub> =3.0V					1	25	100	250
◆ 595-CSD16322Q5C	CSD16322Q5C	SON-8	25	97	136	-	5.0	5.8	7.0	+10/-8	6.8	1.3	3.1	1.49	1.17	1.05	.998
◆ 595-CSD16325Q5C	CSD16325Q5C	SON-8	25	100	200	-	2.0	2.2	2.9	+10/-8	18	3.5	3.1	2.62	2.01	1.83	1.64
◆ 595-CSD16321Q5C	CSD16321Q5C	SON-8	25	100	200	-	2.4	2.6	3.5	+10/-8	14	2.5	3.1	2.31	1.77	1.61	1.45

## CICLON N-CHANNEL NEXFET™ MOSFET

### ◆ Surface Mount Device

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						V <sub>GS</sub> =10V	V <sub>GS</sub> =8.0V	V <sub>GS</sub> =4.5V	V <sub>GS</sub> =3.0V					1	25	100	250
◆ 595-CSD16412Q5A	CSD16412Q5A	SON-8	25	52	91	11	-	16	-	+16/-12	2.9	0.7	3.0	.99	.783	.707	.666

## P-CHANNEL NEXFET™ MOSFETS

NexFET™ power MOSFET technology delivers half the gate charge for the same resistance so that designers can achieve 90% power-supply efficiencies with double the frequency. NexFET™ power MOSFET technology improves energy efficiency in high-power computing, networking, server systems and power supplies.

### ◆ Surface Mount Device



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						V <sub>GS</sub> =10V	V <sub>GS</sub> =8.0V	V <sub>GS</sub> =4.5V	V <sub>GS</sub> =3.0V					1	25	100	250
◆ 595-CSD23201W10	CSD23201W10	DSBGA-4	-12	-2.2	-8.8	-	-	66	-	-6	1.8	0.26	1	.73	.568	.493	.431
◆ 595-CSD25401Q3	CSD25401Q3	SON-8	-20	-60	-82	-	-	11.7	18.2	+							