

STMicroelectronics Power MOSFET Transistors



Products may be RoHS compliant. Check mouser.com for RoHS status.

N-CHANNEL IGBT (INSULATED GATE BIPOLAR TRANSISTOR) MOSFETS (CONT.)

Using the latest high voltage technology based on a patented strip layout, STMicroelectronics has designed an advanced family of IGBTs, the PowerMESH™ IGBTs, with outstanding performances. The suffix "H" identifies a family optimized for high frequency applications in order to achieve very high switching performances (reduced tfall) maintaining a low voltage drop.



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	STMicroelectronics Part No.	Package	Collector-Emitter Voltage (Min.) (V)	Collector Current (Cont.) (Max.) (A)	Total Dissipation @ 25°C (Max.) (W)	Delay Time		Price Each			
						On (nS) (Typ.)	Off (nS) (Typ.)	1	10	100	250
Surface Mount (Cont.)											
511-STGE200NB60S	STGE200NB60S	ISOTOP	600	150	600	64	1840	35.28	32.63	27.70	25.57
511-STGW60H65DRF	STGW60H65DRF	TO-247	650	120	360	85	34	5.53	4.59	3.95	3.32
511-STGD5NB120SZT4	STGD5NB120SZT4	TO-252	1200	5	55	690	12100	2.17	1.86	1.46	1.28
511-STGB3NC120HDT4	STGB3NC120HDT4	TO-263	1200	7	75	15	118	3.70	3.23	2.90	2.51
Thru-Hole											
511-STGP35N35LZ	STGP35N35LZ	TO-220	20	40	176	110	265	2.94	2.62	2.15	1.94
511-STGF7NC60HD	STGF7NC60HD	TO-220FP	600	7	25	18.5	116	1.58	1.42	1.13	1.01
511-STGP10NC60KD	STGP10NC60KD	TO-220AB	600	10	65	17	72	1.22	1.05	.83	.73
511-STGF7NB60SL	STGF7NB60SL	TO-220FP	600	15	25	1.1	5.2	1.52	1.36	1.17	.98
511-STGF35HF60W	STGF35HF60W	TO-220FP	600	19	40	30	30	2.80	2.46	2.02	1.83
511-STGIPL20K60	STGIPL20K60	SDIP-38L	600	20	56	915	375	21.60	19.98	17.01	15.66
511-STGP10NC60HD	STGP10NC60HD	TO-220AB	600	20	65	14	72	1.17	1.03	.80	.70
511-STGW19NC60WD	STGW19NC60WD	TO-247	600	23	125	25	90	2.70	2.42	1.94	1.72
511-STGP7NC60HD	STGP7NC60HD	TO-220AB	600	25	80	18.5	116	1.56	1.39	1.11	.98
511-STGP20NC60V	STGP20NC60V	TO-220AB	600	30	200	31	100	4.27	3.79	3.11	2.79
511-STGW20NC60VD	STGW20NC60VD	TO-247	600	30	200	31	100	6.42	5.72	4.68	4.22
511-STGW30NC60WD	STGW30NC60WD	TO-247	600	30	200	29.5	118	4.41	3.93	3.21	2.88
511-STGP19NC60KD	STGP19NC60KD	TO-220AB	600	35	125	30	105	2.17	1.95	1.57	1.38
511-STGFW30NC60V	STGFW30NC60V	TO-3-PF	600	36	80	31	100	8.13	7.32	6.78	5.70
511-STGP19NC60HD	STGP19NC60HD	TO-220AB	600	40	130	25	97	2.15	1.87	1.54	1.37
511-STGP19NC60WD	STGP19NC60WD	TO-220AB	600	40	125	25	90	1.78	1.62	1.28	1.13
511-STGW40NC60KD	STGW40NC60KD	TO-247	600	40	250	46	164	4.41	3.93	3.21	2.88
511-STGWA19NC60HD	STGWA19NC60HD	TO-247	600	42	140	25	97	2.94	2.62	2.15	1.94
511-STGW45HF60WD	STGW45HF60WD	TO-247	600	45	250	-	-	4.41	3.93	3.22	2.91
511-STGE50NC60WD	STGE50NC60WD	ISOTOP	600	50	260	52	240	24.80	22.84	19.48	17.82
511-STGW35HF60W	STGW35HF60W	TO-247	600	60	200	30	175	3.13	2.75	2.26	2.05
511-STGW35HF60WD	STGW35HF60WD	TO-247	600	60	200	30	175	4.12	3.67	3.01	2.71
511-STGW40NC60WD	STGW40NC60WD	TO-247	600	70	250	33	138	4.58	4.07	3.33	2.99
511-STGWA45HF60WDI	STGWA45HF60WDI	TO-247L	600	80	310	-	-	6.12	5.37	4.41	4.00
511-STGW39NC60VD	STGW39NC60VD	TO-247	600	80	250	33	178	4.30	3.78	3.10	2.81
511-STGW40NC60V	STGW40NC60V	TO-247	600	100	260	43	140	6.64	5.96	4.87	4.47
511-STGW50H60DF	STGW50H60DF	TO-247	600	100	360	62	178	4.30	3.78	3.10	2.81
511-STGW50HF60S	STGW50HF60S	TO-247	600	110	284	50	220	7.00	6.14	5.04	4.58
511-STGW50HF60SD	STGW50HF60SD	TO-247	600	110	284	50	220	6.75	6.07	4.99	4.59
511-STGW60H65F	STGW60H65F	TO-247	650	120	360	65	180	3.27	2.87	2.36	2.14
511-STGW60H65DF	STGW60H65DF	TO-247	650	120	360	67	165	4.77	4.30	3.98	3.34
511-STGF3NC120HD	STGF3NC120HD	TO-220FP	1200	3	25	15	118	1.68	1.50	1.19	1.04
511-STGW30NC120HD	STGW30NC120HD	TO-247	1200	30	220	29	275	9.48	8.32	6.82	6.20
511-STGW30N120KD	STGW30N120KD	TO-247	1200	60	220	36	251	4.27	3.79	3.08	2.78
511-STGW40N120KD	STGW40N120KD	TO-247	1200	80	240	48	338	4.68	4.19	3.41	3.07
511-STGW38IH130D	STGW38IH130D	TO-247	1300	55	180	-	-	5.39	4.83	3.96	3.57
511-STGWT38IH130D	STGWT38IH130D	TO-247	1300	55	180	-	102	4.80	4.21	3.46	3.14

IGBT INTELLIGENT POWER MODULES (IPM)

IGBT intelligent power modules (IPMs) extend ST's appliance control product range with a thermally efficient solution that simplifies design by combining application specific IGBTs and diodes, proprietary control functions, smart protections and extra optional features. Directly connected to the microcontroller, IPMs convert microcontroller output into the correct high-power waveform to drive the motor. One module can replace more than 30 discrete components, thereby increasing reliability while reducing size and cost.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	STMicroelectronics Part No.	Package	Collector-Emitter Voltage (Min.) (V)	Collector Current (Cont.) (Max.) (A)	Each IGBT Total Dissipation @ 25°C (Max.) (W)	Short Circuit Withstand Time (Max.) (μS)	Isolation Withstand Voltage (Max.) (V)	Price Each			
								1	10	100	250
Thru-Hole											
511-STGIPN3H60A	STGIPN3H60A	NDIP-26L	600	3	8	-	1000	17.40	16.24	15.08	14.50
511-STGIPS10K60A	STGIPS10K60A	SDIP-25L	600	10	44	5	2500	24.50	21.51	17.64	16.03
511-STGIPL14K60	STGIPL14K60	SDIP-39L	600	15	44	5	2500	19.82	18.23	16.67	15.15
511-STGIPS20K60	STGIPS20K60	SDIP-25L	600	18	52	5	2500	20.18	18.52	15.84	14.61
511-STGIPN3H60	STGIPN3H60	NDIP-26L	600	18	8	-	1000	17.20	16.35	15.60	14.89
Demonstration Board								Price Each			
511-STEVAL-IHM027V1	STEVAL-IHM027V1	Description: Demonstration board featuring the STGIPS10K60A, a 10A IGBT intelligent power module (IPM)					93.75				

AUTOPROTECTED POWER MOSFETS

The VND5N07, VND5N07-1, VNPSN07F1 and VNKS07FM are monolithic devices made using STMicroelectronics VIPower M0 Technology, intended for replacement of standard power MOSFETS in DC to 50 KHz applications. Built-in thermal shut-down, linear current limitation and overvoltage clamp protect the chip in harsh environments.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	STMicroelectronics Part No.	Package	Drain Source Clamp Voltage Min. (V)	Drain Current Limit Min. (A)	Static Drain-Source On State Resistance Max. (Ω)	Power Dissipation (W)	Turn-On/Turn-Off Delay Time Typ. (nS)	Price Each			
								1	10	100	250
Surface Mount											
511-VNN1NV04	VNN1NV0413TR	SOT-223	40	1.7	250	7	200/1000	1.35	1.21	.962	.838
511-VNN3NV04PTR-E	VNN3NV04PTR-E	SOT-223	40	3.5	0.12	7	750/750	1.20	1.12	1.04	.96
511-VNN3NV04	VNN3NV0413TR	SOT-223	40	3.5	120	7	300/1350	1.59	1.39	1.07	.95
511-VNS3NV04D	VNS3NV04D	SO-8	40	3.5	120	4	300/1350	2.05	1.75	1.39	1.23
511-VNN7NV04	VNN7NV0413TR	SOT-223	40	6	60	7	100/500	1.79	1.53	1.24	1.12
511-VNB14NV0413TR	VNB14NV0413TR	TO-252	40	12	35	74	80/450	2.21	2.17	2.00	1.83
511-VNS3NV04DP-E	VNS3NV04DP-E	SO-8	40	12	0.35	8.3	750/750	2.04	1.75	1.39	1.22
511-VND7NV04TR-E	VND7NV04TR-E	TO-252	40	6	60	7	300/1500	1.75	1.56	1.22	1.09
511-VNN7NV04PTR-E	VNN7NV04PTR-E	SOT-223	40	6	65	7	100/500	1.69	1.48	1.15	1.03
511-VNS1NV04DPTR-E	VNS1NV04DPTR-E	SO-8	40	1.7	25	4	70/350	1.51	1.32	1.03	.92
511-VNS1NV04PTR-E	VNS1NV04PTR-E	SO-8	40	1.7	25	7	70/350	1.25	.97	.88	.77
511-VND5N07-E	VND5N07-E	TO-252	60	5	0.2	60	50/150	1.80	1.62	1.30	1.16
511-VND5N07	VND5N07	TO-252	70	5	0.2	60	100/300	1.95	1.76	1.41	1.26
Thru-Hole											
511-VNP49N04-E	VNP49N04-E	TO-220AB	42	49	0.05	125	600/2400	3.39	3.34	2.92	2.52
511-VNP10N06-E	VNP10N06-E	TO-220AB	60	10	0.3	42	1600/400	1.15	1.10	.981	.854
511-VNP10N07-E	VNP10N07-E	TO-220AB	70	10	0.1	50	100/400	1.70	1.63	1.45	1.26
511-VNP35N07-E	VNP35N07-E	TO-220AB	70	35	0.035	125	200/1000	4.13	3.96	3.52	3.07

