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Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





Short Form Catalog 2016

High power semiconductors for industrial applications

www.infineon.com/power





Content

Bare dies	4	Driver & controller	72
IGBT bare die	6	Driver	74
Chip diode	14	Controller – digital motor controller (iMOTION™)	88
Discrete	18	SiC	90
Discrete IGBT with anti-parallel diode	20	Cool SiC Schottky diodes	92
Discrete IGBT without anti-parallel diode	31	CoolSiC™ 1200 V SiC JFET & direct drive technology	94
600V/ 1200V ultra soft diode	36	SiC modules	95
650V rapid 1 and rapid 2 diode	38	Presspacks	96
IGBT modules	40	Fast rectifier diodes	98
IGBT modules up to 600V / 650V	42	Rectifier diodes	99
IGBT modules up 1200V	45	IGCT/ IGBT – freewheeling diodes	103
IGBT modules up 1600V / 1700V	53	Thyristor Presspacks	104
IGBT modules up to 3300V	56	Diode/ thyristor studs	112
IGBT modules up to 4500V/ 6500V	57	Welding diodes	114
IPMs	58	Accessories	115
Intelligent high power modules	60	SCR / diode modules	116
Intelligent power modules	61	Thyristor / diode modules	118
Stacks & boards	66	Accessories	129
Stacks	68	Bridge rectifier and AC-switches	130
Evaluation boards	69	Solid state relays	132
		Photovoltaic isolators	134
		Photovoltaic relays	135

Bare dies

Discrete

IGBT modules

IPMs

Stacks & boards

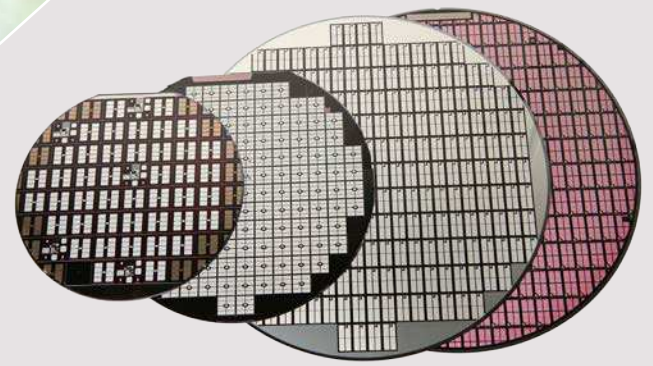
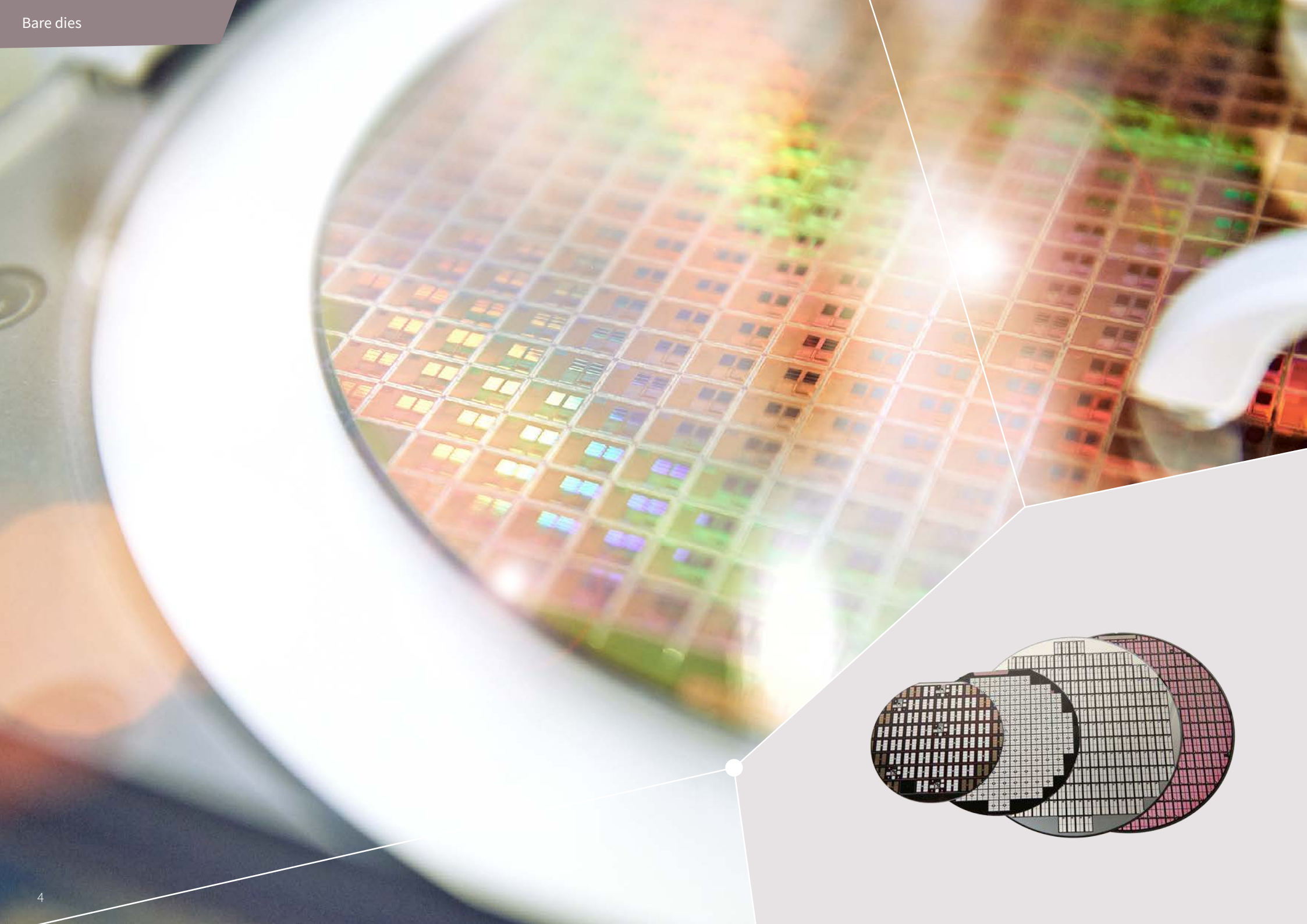
Driver & controller

SiC

Presspacks

SCR / diode modules

Solid state relays



Bare dies

IGBTs and diodes

The TRENCHSTOP™ IGBT combines the unique Trench- and Fieldstop-Technology and is a benchmark in the Industry. Portfolio includes the voltage range from 600V up to 1700V with several different versions, and is optimized for a wide range of applications like Drives, Renewable energy, Welding and Power supplies.

www.infineon.com/igbt-bare-dies

Emitter Controlled-Diode is Infineon unique Fast Recovery Diode technology. The Ultrathin wafer and field-stop technology makes the Emitter Controlled-Diode from Infineon ideally suited for consumer & industry applications as it lower the turn-on losses of the IGBT with soft recovery. The Emitter Controlled-Diode is optimized for Infineon IGBT technology.

www.infineon.com/diode-bare-dies

Bare dies

Discrete

IGBT
modules

IPMs

Stacks &
boardsDriver &
controller

SiC

Presspacks

SCR / diode
modulesSolid state
relays

IGBT bare die (400V-1200V)

Product	Product status	$V_{CE,max}$ [A]	I_c,max [A]	$V_{CE(sat),max}$ [V]	$V_{GE(th),min}$ [V]	$V_{GE(th),max}$ [V]	t_r [ns]	t_f [ns]	Operating temperature min	Operating temperature max
IGBT HighSpeed 3										
IGC10T65QE	active and preferred	650.0	20.0	2.32	4.2	5.6	-	-	-40.0 °C	175.0 °C
IGC15T65QE	active and preferred	650.0	30.0	2.32	4.2	5.6	-	-	-40.0 °C	175.0 °C
IGC19T65QE	active and preferred	650.0	40.0	2.32	4.2	5.6	-	-	-40.0 °C	175.0 °C
IGC28T65QE	active and preferred	650.0	50.0	2.22	4.2	5.6	-	-	-40.0 °C	175.0 °C
IGC31T65QE	active and preferred	650.0	60.0	2.22	4.2	5.6	-	-	-40.0 °C	175.0 °C
IGC39T65QE	active and preferred	650.0	75.0	2.22	4.2	5.6	-	-	-40.0 °C	175.0 °C
IGC54T65R3QE	active and preferred	650.0	100.0	2.22	4.2	5.6	-	-	-40.0 °C	175.0 °C
IGC18T120T8Q	active and preferred	1200.0	15.0	2.42	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC27T120T8Q	active and preferred	1200.0	25.0	2.42	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC41T120T8Q	active and preferred	1200.0	40.0	2.42	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC50T120T8RQ	active and preferred	1200.0	50.0	2.42	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC70T120T8RQ	active and preferred	1200.0	75.0	2.42	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC99T120T8RQ	active and preferred	1200.0	100.0	2.42	5.1	6.4	-	-	-40.0 °C	175.0 °C

IGBT bare die (400V-1200V)

Product	Product status	$V_{CE,max}$ [A]	I_r,max [A]	$V_{CE(sat),max}$ [V]	$V_{GE(th),min}$ [V]	$V_{GE(th),max}$ [V]	t_r [ns]	t_f [ns]	Operating temperature min	Operating temperature max
IGBT3										
SIGC03T60E	active and preferred	600.0	4.0	1.9	5.0	6.5	-	-	-40.0 °C	175.0 °C
SIGC04T60E	active and preferred	600.0	6.0	1.9	5.0	6.5	-	-	-40.0 °C	175.0 °C
SIGC04T60GE	active and preferred	600.0	6.0	1.9	5.0	6.5	-	-	-40.0 °C	175.0 °C
SIGC06T60E	active and preferred	600.0	10.0	1.9	5.0	6.5	-	-	-40.0 °C	175.0 °C
SIGC06T60GE	active and preferred	600.0	10.0	1.9	5.0	6.5	-	-	-40.0 °C	175.0 °C
SIGC08T60E	active and preferred	600.0	15.0	1.9	5.0	6.5	-	-	-40.0 °C	175.0 °C
SIGC10T60E	active and preferred	600.0	20.0	1.9	5.0	6.5	-	-	-40.0 °C	175.0 °C
SIGC15T60E	active and preferred	600.0	30.0	1.9	5.0	6.5	-	-	-40.0 °C	175.0 °C
SIGC28T60E	active and preferred	600.0	50.0	1.85	5.0	6.5	-	-	-40.0 °C	175.0 °C
SIGC39T60E	active and preferred	600.0	75.0	1.85	5.0	6.5	-	-	-40.0 °C	175.0 °C
SIGC40T60R3E	active and preferred	600.0	75.0	1.85	5.0	6.5	-	-	-40.0 °C	175.0 °C
SIGC54T60R3E	active and preferred	600.0	100.0	1.85	5.0	6.5	-	-	-40.0 °C	175.0 °C
SIGC76T60R3E	active and preferred	600.0	150.0	1.85	5.0	6.5	-	-	-40.0 °C	175.0 °C
SIGC100T60R3E	active and preferred	600.0	200.0	1.85	5.0	6.5	-	-	-40.0 °C	175.0 °C
SIGC128T170R3E	active and preferred	1700.0	100.0	2.4	5.2	6.4	-	-	-55.0 °C	150.0 °C
SIGC04T65E	active and preferred	650.0	6.0	1.87	5.1	6.5	-	-	-40.0 °C	175.0 °C
SIGC06T65E	active and preferred	650.0	10.0	1.87	5.1	6.5	-	-	-40.0 °C	175.0 °C
SIGC06T65GE	active and preferred	650.0	10.0	1.87	5.1	6.4	-	-	-40.0 °C	175.0 °C
SIGC08T65E	active and preferred	650.0	15.0	1.87	5.1	6.4	-	-	-40.0 °C	175.0 °C
SIGC10T65E	active and preferred	650.0	20.0	1.87	5.1	6.4	-	-	-40.0 °C	175.0 °C
SIGC15T65E	active and preferred	650.0	30.0	1.87	5.1	6.4	-	-	-40.0 °C	175.0 °C
SIGC28T65E	active and preferred	650.0	50.0	1.77	5.1	6.4	-	-	-40.0 °C	175.0 °C
SIGC39T65E	active and preferred	650.0	75.0	1.77	5.1	6.4	-	-	-40.0 °C	175.0 °C
SIGC40T65R3E	active and preferred	650.0	75.0	1.77	5.1	6.4	-	-	-40.0 °C	175.0 °C
SIGC54T65R3E	active and preferred	650.0	100.0	1.77	5.1	6.4	-	-	-40.0 °C	175.0 °C
SIGC76T65R3E	active and preferred	650.0	150.0	1.2	5.1	6.4	-	-	-40.0 °C	175.0 °C
SIGC78T65R3E	active and preferred	650.0	150.0	1.54	5.1	6.4	-	-	-40.0 °C	175.0 °C
SIGC100T65R3E	active and preferred	650.0	200.0	1.2	5.1	6.4	-	-	-40.0 °C	175.0 °C
SIGC12T120E	active and preferred	1200.0	8.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C
SIGC12T120LE	active and preferred	1200.0	8.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C
SIGC20T120E	active and preferred	1200.0	15.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C
SIGC20T120LE	active and preferred	1200.0	15.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C
SIGC32T120R3E	active and preferred	1200.0	25.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C
SIGC32T120R3LE	active and preferred	1200.0	25.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C
SIGC41T120R3E	active and preferred	1200.0	35.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C
SIGC41T120R3LE	active and preferred	1200.0	40.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C

IGBT bare die (400V-1200V)

Product	Product status	V _{CE} max [A]	I _c max [A]	V _{CE(sat)} max [V]	V _{GE(th)} min [V]	V _{GE(th)} max [V]	t _r [ns]	t _f [ns]	Operating temperature min	Operating temperature max
IGBT3										
SIGC57T120R3E	active and preferred	1200.0	50.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C
SIGC57T120R3LE	active and preferred	1200.0	50.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C
SIGC84T120R3E	active and preferred	1200.0	75.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C
SIGC84T120R3LE	active and preferred	1200.0	75.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C
SIGC109T120R3E	active and preferred	1200.0	100.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C
SIGC109T120R3LE	active and preferred	1200.0	100.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C
SIGC158T120R3E	active and preferred	1200.0	150.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C
SIGC158T120R3LE	active and preferred	1200.0	150.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C
SIGC42T170R3E	active and preferred	1700.0	29.0	2.4	5.2	6.4	-	-	-55.0 °C	150.0 °C
SIGC68T170R3E	active and preferred	1700.0	50.0	2.4	5.2	6.4	-	-	-55.0 °C	150.0 °C
SIGC101T170R3E	active and preferred	1700.0	75.0	2.4	5.2	6.4	-	-	-55.0 °C	150.0 °C
SIGC158T170R3E	active and preferred	1700.0	125.0	2.4	5.2	6.4	-	-	-55.0 °C	150.0 °C
SIGC186T170R3E	active and preferred	1700.0	150.0	2.4	5.2	6.4	-	-	-55.0 °C	150.0 °C
IGBT3 Fast										
SIGC04T60GSE	active and preferred	600.0	6.0	2.05	4.1	5.7	-	-	-40.0 °C	150.0 °C
SIGC03T60SE	active and preferred	600.0	4.0	2.05	4.1	5.7	-	-	-40.0 °C	150.0 °C
SIGC08T60SE	active and preferred	600.0	15.0	2.05	4.1	5.7	-	-	-40.0 °C	150.0 °C
SIGC10T60SE	active and preferred	600.0	20.0	2.05	4.1	5.7	-	-	-40.0 °C	150.0 °C
SIGC15T60SE	active and preferred	600.0	30.0	2.05	4.1	5.7	-	-	-40.0 °C	150.0 °C
SIGC19T60SE	active and preferred	600.0	40.0	1.97	4.2	5.6	-	-	-40.0 °C	150.0 °C
IGBT3 High Power										
IGC114T170S8RH	active and preferred	1700.0	100.0	2.15	5.2	6.4	-	-	-40.0 °C	150.0 °C
IGC168T170S8RH	active and preferred	1700.0	150.0	2.15	5.2	6.4	-	-	-40.0 °C	150.0 °C
IGC136T170S8RH2	active and preferred	1700.0	117.5	-	5.3	6.3	-	-	-40.0 °C	150.0 °C
IGBT3 Medium Power										
IGC28T65T8M	active and preferred	650.0	50.0	1.82	5.1	6.4	-	-	-40.0 °C	175.0 °C
IGC39T65T8M	active and preferred	650.0	75.0	1.82	5.1	6.4	-	-	-40.0 °C	175.0 °C
IGC54T65T8RM	active and preferred	650.0	100.0	1.82	5.1	6.4	-	-	-40.0 °C	175.0 °C
IGC76T65T8RM	active and preferred	650.0	150.0	1.23	5.1	6.4	-	-	-40.0 °C	175.0 °C
IGC100T65T8RM	active and preferred	650.0	200.0	1.23	5.1	6.4	-	-	-40.0 °C	175.0 °C
IGC89T170S8RM	active and preferred	1700.0	75.0	2.2	5.2	6.4	-	-	-40.0 °C	150.0 °C
IGC114T170S8RM	active and preferred	1700.0	100.0	2.2	5.2	6.4	-	-	-40.0 °C	150.0 °C
IGC168T170S8RM	active and preferred	1700.0	150.0	2.2	5.2	6.4	-	-	-40.0 °C	150.0 °C

IGBT bare die (400V-1200V)

Product	Product status	$V_{CE,max}$ [A]	I_c,max [A]	$V_{CE(sat),max}$ [V]	$V_{GE(th),min}$ [V]	$V_{GE(th),max}$ [V]	t_r [ns]	t_f [ns]	Operating temperature min	Operating temperature max
IGBT3 RC Drives										
IGC03R60DE	active and preferred	600.0	2.5	2.1	4.3	5.7	-	-	-40.0 °C	175.0 °C
IGC04R60DE	active and preferred	600.0	4.0	2.1	4.3	5.7	-	-	-40.0 °C	175.0 °C
IGC05R60DE	active and preferred	600.0	6.0	2.1	4.3	5.7	-	-	-40.0 °C	175.0 °C
IGC06R60DE	active and preferred	600.0	8.0	2.1	4.3	5.7	-	-	-40.0 °C	175.0 °C
IGC07R60DE	active and preferred	600.0	10.0	2.1	4.3	5.7	-	-	-40.0 °C	175.0 °C
IGC10R60DE	active and preferred	600.0	15.0	5.7	4.3	5.7	-	-	-40.0 °C	175.0 °C
IGBT4 Low Power										
IGC99T120T8RH	active and preferred	1200.0	100.0	1.92	5.1	6.4	-	-	-40.0 °C	175.0 °C
IGC142T120T8RH	active and preferred	1200.0	150.0	1.26	5.1	6.4	-	-	-40.0 °C	175.0 °C
IGC11T120T8L	active and preferred	1200.0	8.0	2.07	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC07T120T8L	active and preferred	1200.0	4.0	2.02	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC142T120T8RL	active and preferred	1200.0	150.0	1.74	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC189T120T8RL	active and preferred	1200.0	200.0	2.05	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC18T120T8L	active and preferred	1200.0	15.0	2.07	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC27T120T8L	active and preferred	1200.0	25.0	2.07	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC36T120T8L	active and preferred	1200.0	35.0	2.07	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC50T120T8RL	active and preferred	1200.0	50.0	2.07	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC70T120T8RL	active and preferred	1200.0	75.0	2.07	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC99T120T8RL	active and preferred	1200.0	100.0	1.97	5.1	6.4	-	-	-40.0 °C	175.0 °C
IGC13T120T8L	active and preferred	1200.0	10.0	2.07	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGBT4 Medium Power										
IGC142T120T8RM	active and preferred	1200.0	150.0	1.74	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC193T120T8RM	active and preferred	1200.0	200.0	1.3	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC70T120T8RM	active and preferred	1200.0	75.0	2.07	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC99T120T8RM	active and preferred	1200.0	100.0	1.97	5.1	6.4	-	-	-40.0 °C	175.0 °C

Bare dies

Discrete

IGBT modules

IPMs

Stacks & boards

Driver & controller

SiC

Presspacks

SCR / diode modules

Solid state relays

IGBT bare die (400V-1200V)

Product	Product status	$V_{CE,max}$ [A]	I_c,max [A]	$V_{CE(sat),max}$ [V]	$V_{GE(th),min}$ [V]	$V_{GE(th),max}$ [V]	t_r [ns]	t_f [ns]	Operating temperature min	Operating temperature max
Gen 4 IGBT										
IRG4CC20FB	active	600.0	9.0	2.0	3.0	6.0	17.0	210.0	-55.0 °C	150.0 °C
IRG4CC20UB	active	600.0	6.5	2.1	3.0	6.0	15.0	110.0	-55.0 °C	150.0 °C
IRG4CC30FB	active	600.0	17.0	1.8	3.0	6.0	26.0	160.0	-55.0 °C	150.0 °C
IRG4CC30SB	active	600.0	18.0	1.6	3.0	6.0	18.0	390.0	-55.0 °C	150.0 °C
IRG4CC30UB	active	600.0	12.0	2.1	3.0	6.0	21.0	80.0	-55.0 °C	150.0 °C
IRG4CC40FB	active	600.0	27.0	1.7	3.0	6.0	18.0	170.0	-55.0 °C	150.0 °C
IRG4CC40KB	active	600.0	25.0	2.6	3.0	6.0	15.0	140.0	-55.0 °C	150.0 °C
IRG4CC40UB	active	600.0	20.0	2.1	3.0	6.0	19.0	120.0	-55.0 °C	150.0 °C
IRG4CC40WB	active	600.0	20.0	2.5	3.0	6.0	22.0	74.0	-55.0 °C	150.0 °C
IRG4CC50FB	active	600.0	39.0	1.6	3.0	6.0	25.0	140.0	-55.0 °C	150.0 °C
IRG4CC50KB	active	600.0	30.0	2.2	3.0	6.0	49.0	95.0	-55.0 °C	150.0 °C
IRG4CC50SB	active	600.0	41.0	1.36	3.0	6.0	30.0	400.0	-55.0 °C	150.0 °C
IRG4CC50UB	active	600.0	27.0	2.0	3.0	6.0	27.0	130.0	-55.0 °C	150.0 °C
IRG4CC50WB	active	600.0	27.0	2.3	3.0	6.0	33.0	57.0	-55.0 °C	150.0 °C
IRG4CC50WC	active	600.0	27.0	2.3	3.0	6.0	33.0	57.0	-55.0 °C	150.0 °C
IRG4CC60UB	active	600.0	40.0	2.0	3.0	6.0	42.0	100.0	-55.0 °C	150.0 °C
IRG4CC71UB	active	600.0	60.0	2.0	3.0	6.0	50.0	86.0	-55.0 °C	150.0 °C
IRG4CC80SB	active	600.0	-	-	3.0	6.0	-	-	-55.0 °C	150.0 °C
IRG4CF50WB	active	900.0	28.0	2.7	3.0	6.0	50.0	110.0	-55.0 °C	150.0 °C
IRG4CH20KB	active	1200.0	5.0	4.3	3.0	6.0	26.0	270.0	-55.0 °C	150.0 °C
IRG4CH30KB	active	1200.0	10.0	4.2	3.0	6.0	23.0	110.0	-55.0 °C	150.0 °C
IRG4CH50UB	active	1200.0	24.0	3.7	3.0	6.0	15.0	290.0	-55.0 °C	150.0 °C
IRG4CH71KB	active	1200.0	42.0	3.9	3.0	6.0	84.0	130.0	-55.0 °C	150.0 °C
IRG4CH71UB	active	1200.0	70.0	2.7	3.0	6.0	77.0	220.0	-55.0 °C	150.0 °C
IRGC14C40LD	active	400.0	14.0	1.75	1.3	2.2	2.8	-	-40.0 °C	175.0 °C

IGBT bare die (400V-1200V)

Product	Product status	V _{CE} max [A]	I _c max [A]	V _{CE(sat)} max [V]	V _{GE(th)} min [V]	V _{GE(th)} max [V]	t _r [ns]	t _f [ns]	Operating temperature min	Operating temperature max
Gen 5 IGBT										
IRGC100B120KB	active	1200.0	100.0	2.6	4.5	6.0	110.0	150.0	-55.0 °C	150.0 °C
IRGC100B120UB	active	1200.0	100.0	3.5	4.5	6.0	110.0	130.0	-55.0 °C	150.0 °C
IRGC100B60KB	active	600.0	100.0	2.1	3.5	5.5	130.0	125.0	-55.0 °C	150.0 °C
IRGC100B60KC	active	600.0	100.0	2.1	3.5	5.5	130.0	125.0	-55.0 °C	150.0 °C
IRGC100B60UB	active	600.0	100.0	2.9	3.5	5.5	100.0	85.0	-55.0 °C	150.0 °C
IRGC10B60KB	active	600.0	10.0	1.3	3.5	5.5	20.0	23.0	-55.0 °C	150.0 °C
IRGC15B120KB	active	1200.0	15.0	2.3	4.4	6.0	-	-	-55.0 °C	150.0 °C
IRGC15B120KD	active	1200.0	15.0	2.3	4.4	6.0	-	-	-55.0 °C	150.0 °C
IRGC15B120UB	active	1200.0	15.0	3.45	4.4	6.0	-	-	-55.0 °C	150.0 °C
IRGC15B60KB	active	600.0	15.0	1.35	3.5	5.5	16.0	20.0	-55.0 °C	150.0 °C
IRGC15B60KD	active	600.0	15.0	1.35	3.5	5.5	16.0	20.0	-55.0 °C	150.0 °C
IRGC20B60KB	active	600.0	20.0	1.3	3.5	5.5	-	-	-55.0 °C	150.0 °C
IRGC20B60KC	active	600.0	20.0	1.3	3.5	5.5	-	-	-55.0 °C	150.0 °C
IRGC25B120KB	active	1200.0	25.0	1.95	4.4	6.0	25.0	60.0	-55.0 °C	150.0 °C
IRGC25B120UB	active	1200.0	25.0	2.7	4.4	6.0	20.0	24.0	-55.0 °C	150.0 °C
IRGC25B120UD	active	1200.0	25.0	2.7	4.4	6.0	20.0	24.0	-55.0 °C	150.0 °C
IRGC26B120KB	active	1200.0	25.0	1.96	4.4	6.0	-	-	-55.0 °C	150.0 °C
IRGC2B60KB	active	600.0	2.0	2.16	4.0	6.0	8.7	56.0	-55.0 °C	150.0 °C
IRGC30B60KB	active	600.0	30.0	1.35	3.5	5.5	28.0	31.0	-55.0 °C	150.0 °C
IRGC30B60KD	active	600.0	30.0	1.35	3.5	5.5	28.0	31.0	-55.0 °C	150.0 °C
IRGC35B120KB	active	1200.0	35.0	1.72	4.4	6.0	40.0	170.0	-55.0 °C	150.0 °C
IRGC35B60PB	active	600.0	35.0	1.7	3.0	5.0	6.0	8.0	-55.0 °C	150.0 °C
IRGC49B120KB	active	1200.0	50.0	1.60	4.4	6.0	32.0	45.0	-55.0 °C	150.0 °C
IRGC49B120UB	active	1200.0	50.0	2.25	4.4	6.0	39.0	25.0	-55.0 °C	150.0 °C
IRGC50B120KB	active	1200.0	50.0	2.6	4.5	6.0	85.0	145.0	-55.0 °C	150.0 °C
IRGC50B120UB	active	1200.0	50.0	3.5	4.5	6.0	70.0	125.0	-55.0 °C	150.0 °C
IRGC50B120UD	active	1200.0	50.0	3.5	4.5	6.0	70.0	125.0	-55.0 °C	150.0 °C
IRGC50B60KB	active	600.0	50.0	1.35	3.5	5.5	75.0	90.0	-55.0 °C	150.0 °C
IRGC50B60PB	active	600.0	50.0	1.65	3.0	5.0	10.0	11.0	-55.0 °C	150.0 °C
IRGC50B60PD	active	600.0	50.0	1.65	3.0	5.0	10.0	11.0	-55.0 °C	150.0 °C
IRGC5B120KB	active	1200.0	5.0	2.22	4.4	6.0	19.0	19.0	-55.0 °C	150.0 °C
IRGC5B60KB	active	600.0	5.0	1.25	3.5	5.5	17.0	13.2	-55.0 °C	150.0 °C
IRGC75B120KB	active	1200.0	75.0	2.6	4.5	6.0	85.0	170.0	-55.0 °C	150.0 °C
IRGC75B120UB	active	1200.0	75.0	3.5	4.5	6.0	90.0	120.0	-55.0 °C	150.0 °C
IRGC75B60KB	active	600.0	75.0	2.1	3.5	5.5	165.0	125.0	-55.0 °C	150.0 °C
IRGC75B60UB	active	600.0	75.0	3.5	4.5	6.0	100.0	120.0	-55.0 °C	150.0 °C

IGBT bare die (400V-1200V)

Product	Product status	V _{CE} max [A]	I _c max [A]	V _{CE(sat)} max [V]	V _{GE(th)} min [V]	V _{GE(th)} max [V]	t _r [ns]	t _f [ns]	Operating temperature min	Operating temperature max
Gen 5 IGBT										
IRGC8B120KB	active	1200.0	8.0	2.27	4.4	6.0	-	-	-55.0 °C	150.0 °C
IRGC8B60KB	active	600.0	8.0	1.4	3.5	5.5	22.0	32.0	-55.0 °C	150.0 °C
IRGC9B120KB	active	1200.0	9.0	2.27	4.4	6.0	-	-	-55.0 °C	150.0 °C
Gen 6 IGBT										
IRGC4045B	active and preferred	600.0	6.0	2.0	4.0	6.5	11.0	17.0	-55.0 °C	175.0 °C
IRGC4056B	active and preferred	600.0	12.0	1.85	4.0	6.5	17.0	24.0	-55.0 °C	175.0 °C
IRGC4056F	active and preferred	600.0	12.0	1.85	4.0	6.5	17.0	24.0	-55.0 °C	175.0 °C
IRGC4059B	active and preferred	600.0	4.0	2.05	4.0	6.5	10.0	15.0	-55.0 °C	175.0 °C
IRGC4060B	active and preferred	600.0	8.0	1.85	4.0	6.5	15.0	20.0	-55.0 °C	175.0 °C
IRGC4061B	active and preferred	600.0	18.0	1.95	4.0	6.5	25.0	25.0	-55.0 °C	175.0 °C
IRGC4061F	active and preferred	600.0	18.0	1.95	4.0	6.5	25.0	25.0	-55.0 °C	175.0 °C
IRGC4062B	active and preferred	600.0	24.0	1.95	4.0	6.5	22.0	29.0	-55.0 °C	175.0 °C
IRGC4063B	active and preferred	600.0	48.0	2.14	4.0	6.5	45.0	45.0	-55.0 °C	175.0 °C
IRGC4063D	active and preferred	600.0	48.0	2.14	4.0	6.5	45.0	45.0	-55.0 °C	175.0 °C
IRGC4064B	active and preferred	600.0	10.0	1.91	4.0	6.5	15.0	21.0	-55.0 °C	175.0 °C
IRGC4066B	active and preferred	600.0	75.0	2.1	4.0	6.5	70.0	60.0	-55.0 °C	175.0 °C
IRGC4066F	active and preferred	600.0	75.0	2.1	4.0	6.5	70.0	60.0	-55.0 °C	175.0 °C
IRGC4067B	active and preferred	600.0	120.0	2.05	4.0	6.5	130.0	130.0	-55.0 °C	175.0 °C
IRGC4069B	active and preferred	600.0	35.0	1.95	4.0	6.5	33.0	44.0	-55.0 °C	175.0 °C
IRGC4069F	active and preferred	600.0	35.0	1.95	4.0	6.5	33.0	44.0	-55.0 °C	175.0 °C
IRGC4263B	active and preferred	650.0	48.0	2.1	5.5	7.7	60.0	30.0	-55.0 °C	175.0 °C
IRGC4271B	active and preferred	650.0	75.0	1.9	5.5	7.7	65.0	25.0	-55.0 °C	175.0 °C
IRGC4273B	active and preferred	650.0	100.0	1.9	5.5	7.7	80.0	35.0	-55.0 °C	175.0 °C
IRGC4274B	active and preferred	650.0	150.0	1.9	5.5	7.7	200.0	85.0	-55.0 °C	175.0 °C
IRGC4275B	active and preferred	650.0	200.0	1.9	5.5	7.7	330.0	140.0	-55.0 °C	175.0 °C
IRGC4615B	active and preferred	600.0	8.0	1.85	4.0	6.5	15.0	20.0	-55.0 °C	175.0 °C
IRGC4615F	active and preferred	600.0	8.0	1.85	4.0	6.5	15.0	20.0	-55.0 °C	175.0 °C
IRGC4620B	active and preferred	600.0	12.0	1.85	4.0	6.5	17.0	24.0	-55.0 °C	175.0 °C
IRGC4620F	active and preferred	600.0	12.0	1.85	4.0	6.5	17.0	24.0	-55.0 °C	175.0 °C
IRGC4630B	active and preferred	600.0	18.0	1.95	4.0	6.5	25.0	25.0	-55.0 °C	175.0 °C
IRGC4640B	active and preferred	600.0	24.0	1.95	4.0	6.5	22.0	29.0	-55.0 °C	175.0 °C
IRGC4640F	active and preferred	600.0	24.0	1.95	4.0	6.5	22.0	29.0	-55.0 °C	175.0 °C
IRGC4660B	active and preferred	600.0	48.0	2.14	4.0	6.5	45.0	45.0	-55.0 °C	175.0 °C

IGBT bare die (400V-1200V)

Product	Product status	$V_{CE,max}$ [A]	I_c,max [A]	$V_{CE(sat),max}$ [V]	$V_{GE(th),min}$ [V]	$V_{GE(th),max}$ [V]	t_r [ns]	t_f [ns]	Operating temperature min	Operating temperature max
Gen 7 IGBT										
IRG7CH28UEF	active	1200.0	25.0	2.2	3.0	6.0	20.0	105.0	-40.0 °C	175.0 °C
IRG7CH30K10EF	active	1200.0	10.0	2.56	5.0	7.5	35.0	120.0	-40.0 °C	175.0 °C
IRG7CH35UEF	active	1200.0	20.0	2.2	3.0	6.0	15.0	80.0	-40.0 °C	175.0 °C
IRG7CH37K10EF	active	1200.0	15.0	2.3	5.0	7.5	27.0	105.0	-40.0 °C	175.0 °C
IRG7CH42UEF	active	1200.0	30.0	2.02	3.0	6.0	32.0	63.0	-40.0 °C	175.0 °C
IRG7CH44K10EF	active	1200.0	25.0	2.3	5.0	7.5	35.0	70.0	-40.0 °C	175.0 °C
IRG7CH46UEF	active	1200.0	40.0	2.0	3.0	6.0	40.0	45.0	-40.0 °C	175.0 °C
IRG7CH50K10EF	active	1200.0	35.0	2.3	5.0	7.5	80.0	30.0	-40.0 °C	175.0 °C
IRG7CH50UEF	active	1200.0	50.0	2.0	3.0	6.0	45.0	45.0	-40.0 °C	175.0 °C
IRG7CH54K10EF-R	active	1200.0	50.0	2.3	5.0	7.5	60.0	55.0	-40.0 °C	175.0 °C
IRG7CH73K10EF-R	active	1200.0	75.0	2.3	5.0	7.5	115.0	60.0	-40.0 °C	175.0 °C
IRG7CH73UEF-R	active	1200.0	75.0	2.0	3.0	6.0	70.0	50.0	-40.0 °C	175.0 °C
IRG7CH75K10EF-R	active	1200.0	100.0	2.3	5.0	7.5	105.0	70.0	-40.0 °C	175.0 °C
IRG7CH75UEF-R	active	1200.0	100.0	2.0	3.0	6.0	100.0	80.0	-40.0 °C	175.0 °C
IRG7CH81K10EF-R	active	1200.0	150.0	2.3	5.0	7.5	130.0	70.0	-40.0 °C	175.0 °C
Gen 8 IGBT										
IRG8CH106K10F	active	1200.0	110.0	2.0	5.0	6.5	30.0	110.0	-40.0 °C	175.0 °C
IRG8CH10K10F	active	1200.0	5.0	2.0	5.0	6.5	20.0	240.0	-40.0 °C	175.0 °C
IRG8CH137K10F	active	1200.0	150.0	2.0	5.0	6.5	45.0	50.0	-40.0 °C	175.0 °C
IRG8CH15K10F	active	1200.0	10.0	2.0	5.0	6.5	20.0	200.0	-40.0 °C	175.0 °C
IRG8CH182K10F	active	1200.0	200.0	2.0	5.0	6.5	65.0	80.0	-40.0 °C	175.0 °C
IRG8CH184K10F	active	1200.0	200.0	2.0	5.0	6.5	40.0	170.0	-40.0 °C	175.0 °C
IRG8CH20K10F	active	1200.0	15.0	2.0	5.0	6.5	20.0	190.0	-40.0 °C	175.0 °C
IRG8CH29K10F	active	1200.0	25.0	2.0	5.0	6.5	20.0	180.0	-40.0 °C	175.0 °C
IRG8CH37K10F	active	1200.0	35.0	2.0	5.0	6.5	25.0	105.0	-40.0 °C	175.0 °C
IRG8CH42K10F	active	1200.0	40.0	2.0	5.0	6.5	30.0	110.0	-40.0 °C	175.0 °C
IRG8CH50K10F	active	1200.0	50.0	2.0	5.0	6.5	30.0	145.0	-40.0 °C	175.0 °C
IRG8CH76K10F	active	1200.0	75.0	2.0	5.0	6.5	15.0	130.0	-40.0 °C	175.0 °C
IRG8CH97K10F	active	1200.0	100.0	2.0	5.0	6.5	20.0	130.0	-40.0 °C	175.0 °C

Chip diode

Product	Product status	V_{D_S} max [V]	I_F max [A]	$I_{(FSM)}$ max [A]	V_F [V]	I_R max [uA]	I_{rrm} [A]
Emitter controlled diode							
SIDC06D60E6	active and preferred	600.0	10.0	30.0	1.25	250.0	8.0
SIDC09D60E6	active and preferred	600.0	20.0	60.0	1.25	250.0	20.0
SIDC14D60E6	active and preferred	600.0	30.0	90.0	1.25	250.0	50.0
SIDC23D60E6	active and preferred	600.0	50.0	150.0	1.25	250.0	75.3
SIDC30D60E6	active and preferred	600.0	75.0	225.0	1.25	250.0	104.0
SIDC42D60E6	active and preferred	600.0	100.0	300.0	1.25	250.0	132.8
SIDC56D60E6	active and preferred	600.0	150.0	450.0	1.25	250.0	190.2
SIDC81D60E6	active and preferred	600.0	200.0	600.0	1.25	250.0	247.7
SIDC42D170E6	active and preferred	1700.0	50.0	100.0	2.15	375.0	36.0
SIDC56D170E6	active and preferred	1700.0	75.0	150.0	2.15	375.0	55.0
SIDC73D170E6	active and preferred	1700.0	100.0	200.0	2.15	375.0	110.0
SIDC03D60F6	active and preferred	600.0	6.0	12.0	1.6	250.0	6.5
SIDC06D120E6	active and preferred	1200.0	5.0	10.0	1.9	250.0	2.3
SIDC23D120E6	active and preferred	1200.0	25.0	50.0	1.9	250.0	23.9
SIDC30D120E6	active and preferred	1200.0	35.0	70.0	1.9	250.0	36.8
SIDC42D120E6	active and preferred	1200.0	50.0	100.0	1.9	250.0	56.2
SIDC56D120E6	active and preferred	1200.0	75.0	150.0	1.9	250.0	88.5
SIDC81D120E6	active and preferred	1200.0	100.0	200.0	1.9	250.0	120.0
SIDC14D120E6	active and preferred	1200.0	15.0	30.0	1.9	250.0	10.9
SIDC07D60E6	active and preferred	600.0	15.0	45.0	1.25	27.0	18.5

Chip diode

Product	Product status	V_{D5} max [V]	I_F max [A]	$I_{(FSM)}$ max [A]	V_F [V]	I_R max [uA]	I_{rm} [A]
Emitter controlled diode 3							
SIDC32D170H	active and preferred	1700.0	50.0	100.0	1.8	250.0	62.0
SIDC59D170H	active and preferred	1700.0	100.0	200.0	1.8	250.0	123.0
SIDC78D170H	active and preferred	1700.0	150.0	300.0	1.8	250.0	175.0
SIDC85D170H	active and preferred	1700.0	150.0	300.0	1.8	250.0	131.0
SIDC110D170H	active and preferred	1700.0	200.0	400.0	1.8	250.0	171.0
SIDC161D170H	active and preferred	1700.0	300.0	600.0	1.8	250.0	233.0
SIDC46D170H	active and preferred	1700.0	75.0	150.0	1.8	250.0	93.0
SIDC112D170H	active and preferred	1700.0	205.0	410.0	1.9	20.0	-
SIDC02D60C8	active and preferred	600.0	6.0	12.0	1.6	27.0	-
SIDC03D60C8	active and preferred	600.0	10.0	20.0	1.6	27.0	-
SIDC05D60C8	active and preferred	600.0	15.0	30.0	1.6	27.0	-
SIDC06D60C8	active and preferred	600.0	20.0	40.0	1.6	27.0	-
SIDC08D60C8	active and preferred	600.0	30.0	60.0	1.6	27.0	-
SIDC14D60C8	active and preferred	600.0	50.0	100.0	1.6	27.0	-
SIDC20D60C8	active and preferred	600.0	75.0	150.0	1.6	27.0	-
SIDC26D60C8	active and preferred	600.0	100.0	200.0	1.6	27.0	-
SIDC38D60C8	active and preferred	600.0	150.0	300.0	1.6	27.0	-
SIDC50D60C8	active and preferred	600.0	200.0	400.0	1.6	27.0	-
SIDC02D65C8	active and preferred	650.0	6.0	12.0	1.55	0.1	-
SIDC03D65C8	active and preferred	650.0	10.0	20.0	1.55	0.14	-
SIDC05D65C8	active and preferred	650.0	15.0	30.0	1.55	0.18	-
SIDC06D65C8	active and preferred	650.0	20.0	40.0	1.55	0.24	-
SIDC08D65C8	active and preferred	650.0	30.0	60.0	1.55	0.36	-
SIDC14D65C8	active and preferred	650.0	50.0	100.0	1.55	0.6	-
SIDC20D65C8	active and preferred	650.0	75.0	150.0	1.55	0.9	-
SIDC26D65C8	active and preferred	650.0	100.0	200.0	1.17	1.2	-
SIDC38D65C8	active and preferred	650.0	150.0	300.0	1.17	1.8	-
SIDC50D65C8	active and preferred	650.0	200.0	-	1.17	2.4	-
Emitter controlled diode 4 high power							
IDC40D120T6H	active and preferred	1200.0	75.0	150.0	1.9	14.0	-
IDC51D120T6H	active and preferred	1200.0	100.0	200.0	1.9	18.0	-
IDC73D120T6H	active and preferred	1200.0	150.0	300.0	1.9	26.0	-

Bare dies

Discrete

IGBT
modules

IPMs

Stacks &
boardsDriver &
controller

SiC

Presspacks

SCR / diode
modulesSolid state
relays

Chip diode

Product	Product status	V_{D5} max [V]	I_F max [A]	$I_{(FSM)}$ max [A]	V_F [V]	I_R max [uA]	I_{rrm} [A]
Emitter controlled diode 4 medium power							
IDC08D120T6M	active and preferred	1200.0	10.0	20.0	1.7	2.7	-
IDC10D120T6M	active and preferred	1200.0	15.0	-	1.7	3.5	-
IDC15D120T6M	active and preferred	1200.0	25.0	50.0	1.7	5.2	-
IDC21D120T6M	active and preferred	1200.0	35.0	70.0	1.7	7.7	-
IDC28D120T6M	active and preferred	1200.0	50.0	100.0	1.7	10.0	-
IDC40D120T6M	active and preferred	1200.0	75.0	-	1.7	14.0	-
IDC51D120T6M	active and preferred	1200.0	100.0	200.0	1.7	18.0	-
IDC73D120T6M	active and preferred	1200.0	150.0	300.0	1.7	26.0	-
Emitter controlled diode fast							
SIDC03D120F6	active and preferred	1200.0	2.0	4.0	2.1	250.0	-
SIDC08D120F6	active and preferred	1200.0	7.0	14.0	2.1	250.0	-
SIDC14D120F6	active and preferred	1200.0	15.0	30.0	2.1	250.0	-
SIDC23D120F6	active and preferred	1200.0	25.0	50.0	2.1	250.0	-
SIDC30D120F6	active and preferred	1200.0	35.0	70.0	2.1	250.0	-
SIDC42D120F6	active and preferred	1200.0	50.0	100.0	2.1	250.0	-
SIDC56D120F6	active and preferred	1200.0	75.0	150.0	2.1	250.0	-
SIDC81D120F6	active and preferred	1200.0	100.0	200.0	2.1	250.0	-
SIDC06D120F6	active and preferred	1200.0	5.0	10.0	2.1	250.0	-
SIDC03D120H8	active and preferred	1200.0	3.0	6.0	1.6	27.0	-
SIDC06D120H8	active and preferred	1200.0	7.5	15.0	1.6	27.0	-
SIDC08D120H8	active and preferred	1200.0	10.0	20.0	1.6	27.0	-
SIDC10D120H8	active and preferred	1200.0	15.0	30.0	1.6	27.0	-
SIDC23D120H8	active and preferred	1200.0	35.0	70.0	1.6	27.0	-
SIDC30D120H8	active and preferred	1200.0	50.0	100.0	1.6	27.0	-
SIDC42D120H8	active and preferred	1200.0	75.0	150.0	1.6	27.0	-
SIDC53D120H8	active and preferred	1200.0	100.0	200.0	1.6	27.0	-
SIDC81D120H8	active and preferred	1200.0	150.0	300.0	1.6	27.0	-
SIDC130D170H	active and preferred	1700.0	235.0	470.0	1.35	11.0	-

Chip diode

Product	Product status	V_{D_S} max [V]	I_F max [A]	$I_{(FSM)}$ max [A]	V_F [V]	I_R max [uA]	I_{rm} [A]
Emitter controlled diode high efficiency							
SIDC02D60F6	active and preferred	600.0	3.0	6.0	1.6	250.0	3.8
SIDC04D60F6	active and preferred	600.0	9.0	18.0	1.6	250.0	10.2
SIDC06D60F6	active and preferred	600.0	15.0	30.0	1.6	250.0	13.7
SIDC07D60AF6	active and preferred	600.0	22.5	45.0	1.5	250.0	17.0
SIDC07D60F6	active and preferred	600.0	22.5	45.0	1.6	250.0	17.0
SIDC09D60F6	active and preferred	600.0	30.0	60.0	1.6	250.0	19.0
SIDC14D60F6	active and preferred	600.0	45.0	90.0	1.6	250.0	23.0
SIDC14D120H8	active and preferred	1200.0	25.0	50.0	1.6	27.0	-
SIDC105D120H8	active and preferred	1200.0	200.0	400.0	1.29	2.6	-

Bare dies

Discrete

IGBT
modules

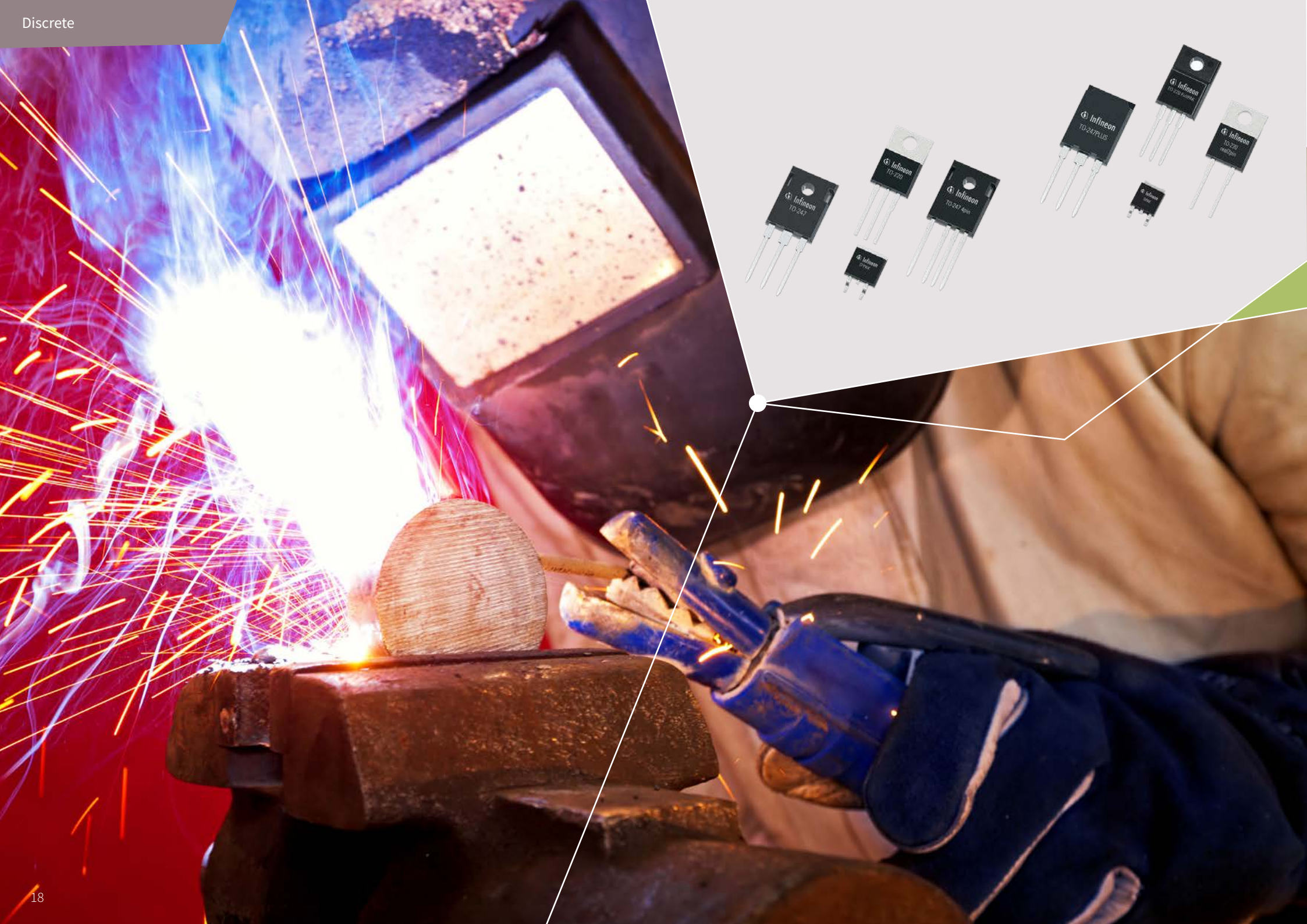
IPMs

Stacks &
boardsDriver &
controller

SiC

Presspacks

SCR / diode
modulesSolid state
relays



Discrete

IGBTs and diodes

Market leadership through groundbreaking innovation and application focus. Striving for the highest standards in performance and quality, Infineon offers a comprehensive application specific discrete IGBT portfolio that is second to none. New products are application specific developed to achieve highest value.

The Silicon Power Rapid Diode family complements Infineon's existing high power

600V/650 V diode portfolio by filling the gap between SiC diodes and previously released emitter-controlled diodes. They represent a perfect cost/performance balance and target high efficiency applications switching between 18 kHz and 100 kHz. Rapid 1 and Rapid 2 diodes are optimized to have excellent compatibility with CoolMOS™ and high speed IGBT (Insulated Gate Bipolar Transistor) such as the TRENCHSTOP™ 5 and HighSpeed 3.

Highlights



650V TRENCHSTOP™ 5 – discover the discrete IGBT families H5/F5/L5/WR5 and the new S5
650V TRENCHSTOP™ 5 is the highest efficiency discrete IGBT technology on the market and ideally suited for customers who are looking for outstanding efficiency and power density. It consists of 5 subcategories – H5, F5, L5, WR5 and the new S5 – positioned clearly according to switching frequencies, targeted for applications such as Welding, UPS, Photovoltaic and Energy Storage.
www.infineon.com/trenchstop5



650V/1200V/1350V Next Generation Reverse Conducting IGBT – higher efficiency and better reliability
The latest generation of reverse conducting IGBTs has been optimized for the demanding requirements of Induction Cooking applications. The new 20 A RC-H5 1200V and 1350 V devices complement the previous generation of reverse conduction IGBTs and extend the performance leadership of the RC-H family, focusing on system efficiency and reliability.
www.infineon.com/rch5



TRENCHSTOP™ 5 in TO-247 4pin package – redefining new levels of switching losses and power density

- > 20 % reduction in total switching losses vs TO-247
- > True benefit seem under high current conditions
- > Extremely low emitter inductance loop

www.infineon.com/to-247-4



Discrete IGBT in TO-247PLUS package – maximum flexibility in high power 600 V designs

- > Highest current rating co-pack 600V in 100 A and 120 A
- > Extended creepage distance of 4.25 mm
- > 20 % lower thermal resistance vs TO-247

www.infineon.com/to-247plus

Discrete IGBT with anti-parallel diode

Product	Package	V _{CE} max [V]	I _C (@ 100°) max [A]	I _C (@ 25°) max [A]	I _{Cpuls} max [A]	P _{tot} max [W]	V _{CE(sat)} [V]	E _{on} [mJ]	E _{off} [mJ]	t _{d(on)} [ns]	t _r [ns]	t _{d(off)} [ns]	t _f [ns]	Q _{Gate} [nC]	I _F max [A]	I _{Fpuls} max [A]	V _F [V]	Q _{rr} [nC]	I _{rrm} [A]
Switching frequency: Fast IGBT 10-40 kHz																			
SKW15N120	TO-247	1200.0	15.0	30.0	52.0	198.0	3.7	1.9	1.5	38.0	30.0	652.0	31.0	130.0	32.0	50.0	2.0	0.5 uC	15.0
SKB02N120	D2PAK (TO-263)	1200.0	2.8	6.2	9.6	62.0	3.7	0.27	0.11	26.0	14.0	290.0	85.0	11.0	4.5	9.0	2.0	0.1 uC	4.2
SKP02N120	TO-220	1200.0	2.8	6.2	9.6	-	3.7	0.27	0.11	26.0	14.0	290.0	85.0	11.0	4.5	9.0	2.0	0.1	4.2
SKW25N120	TO-247	1200.0	25.0	46.0	84.0	313.0	3.7	3.8	2.9	50.0	36.0	820.0	42.0	225.0	42.0	80.0	2.0	1.0 uC	20.0
SKW07N120	TO-247	1200.0	7.9	16.5	27.0	125.0	3.7	1.0	0.7	30.0	26.0	490.0	30.0	70.0	13.0	27.0	2.0	0.3 uC	9.0
SKP10N60A	TO-220	600.0	10.6	20.0	40.0	-	2.3	0.26	0.28	28.0	12.0	198.0	26.0	52.0	21.0	42.0	1.4	310.0	4.5
SKB10N60A	D2PAK (TO-263)	600.0	10.9	21.0	40.0	92.0	2.3	0.26	0.28	28.0	12.0	198.0	26.0	52.0	21.0	42.0	1.4	310.0	4.5
SKB15N60	D2PAK (TO-263)	600.0	15.0	31.0	62.0	139.0	2.3	0.45	0.41	31.0	23.0	261.0	54.0	76.0	31.0	62.0	1.4	390.0	5.0
SKP15N60	TO-220	600.0	15.0	31.0	62.0	-	2.3	0.45	0.41	31.0	23.0	261.0	54.0	76.0	31.0	62.0	1.4	390.0	5.0
SKW15N60	TO-247	600.0	15.0	31.0	62.0	139.0	2.3	0.45	0.41	31.0	23.0	261.0	54.0	76.0	1.4	31.0	62.0	1020.0	7.5
SKB02N60	D2PAK (TO-263)	600.0	2.9	6.0	12.0	30.0	2.2	0.05	0.04	20.0	14.0	287.0	67.0	14.0	6.0	12.0	1.4	0.065 uC	1.9
SKP02N60	TO-220	600.0	2.9	6.0	12.0	-	2.2	0.05	0.04	20.0	14.0	287.0	67.0	14.0	6.0	12.0	1.4	65.0	1.9
SKW20N60	TO-247	600.0	20.0	40.0	80.0	179.0	2.4	0.67	0.49	36.0	30.0	250.0	63.0	100.0	40.0	80.0	1.4	490.0	5.5
SKW30N60	TO-247	600.0	30.0	41.0	112.0	250.0	2.5	0.98	0.92	44.0	34.0	324.0	67.0	140.0	41.0	112.0	1.4	1740.0	9.0
SKP04N60	TO-220	600.0	4.9	9.4	19.0	-	2.3	0.12	0.11	22.0	16.0	264.0	104.0	24.0	10.0	19.0	1.4	130.0	2.5
SKB06N60	D2PAK (TO-263)	600.0	6.9	12.0	24.0	68.0	2.3	0.17	0.15	24.0	17.0	248.0	70.0	32.0	12.0	24.0	1.4	200.0	2.8
SKP06N60	TO-220	600.0	6.9	12.0	24.0	-	2.3	0.17	0.15	24.0	17.0	248.0	70.0	32.0	12.0	24.0	1.4	200.0	2.8
Switching frequency: HighSpeed 30-100 kHz																			
SKB15N60HS	D2PAK (TO-263)	600.0	15.0	27.0	60.0	138.0	3.5	0.48	0.3	12.0	15.0	235.0	17.0	80.0	40.0	80.0	1.5	580.0	14.0
SKW20N60HS	TO-247	600.0	20.0	36.0	80.0	178.0	3.5	0.6	0.36	17.0	13.0	222.0	13.0	100.0	40.0	80.0	1.5	730.0	16.0
SKW30N60HS	TO-247	600.0	30.0	41.0	112.0	250.0	3.5	0.91	0.7	20.0	19.0	274.0	27.0	141.0	41.0 mA	112.0	1.55	0.82 uC	17.0
Switching frequency: HighSpeed2 30-100 kHz																			
IKP01N120H2	TO-220	1200.0	1.3	3.2	3.5	-	2.5	0.11	0.09	12.0	8.9	450.0	43.0	8.6	3.2	-	2.0	89.0	2.5
IKB03N120H2	D2PAK (TO-263)	1200.0	3.9	9.6	9.9	62.5	2.5	0.22	0.26	9.4	6.7	340.0	63.0	22.0	9.6	-	2.0	0.51	12.0
IKP03N120H2	TO-220	1200.0	3.9	9.6	9.9	-	2.5	0.22	0.26	9.4	6.7	340.0	63.0	22.0	9.6	-	2.0	0.23	10.3
IKW03N120H2	TO-247	1200.0	3.9	9.6	9.9	62.5	2.5	0.22	0.26	9.4	6.7	340.0	63.0	22.0	9.6	-	2.0	0.23	10.3

Discrete IGBT with anti-parallel diode

Product	Package	V _{CE} max [V]	I _C (@ 100°) max [A]	I _C (@ 25°) max [A]	I _{Cpuls} max [A]	P _{tot} max [W]	V _{CE(sat)} [V]	E _{on} [mJ]	E _{off} [mJ]	t _{d(on)} [ns]	t _r [ns]	t _{d(off)} [ns]	t _f [ns]	Q _{Gate} [nC]	I _F max [A]	I _{Fpuls} max [A]	V _F [V]	Q _{rr} [nC]	I _{rrm} [A]
Switching frequency: HighSpeed3 20-100 kHz																			
IKW15N120H3	TO-247	1200.0	15.0	30.0	60.0	-	2.05	1.1	0.45	21.0	34.0	260.0	14.0	75.0	15.0	60.0	2.4	800	7.7
IKW25N120H3	TO-247	1200.0	25.0	50.0	100.0	-	2.05	1.8	0.85	26.0	35.0	277.0	17.0	115.0	25.0	100.0	2.4	1200	10.4
IKW40N120H3	TO-247	1200.0	40.0	80.0	160.0	-	2.05	3.2	1.2	30.0	57.0	290.0	16.0	185.0	40.0	160.0	2.4	1900	12.8
IKB20N60H3	D2PAK (TO-263)	600.0	20.0	40.0	80.0	-	1.95	0.45	0.24	16.0	20.0	194.0	11.0	120.0	20.0	80.0	1.65	390	14.2
IKP20N60H3	TO-220	600.0	20.0	40.0	80.0	-	1.95	0.45	0.24	16.0	20.0	194.0	11.0	120.0	20.0	80.0	1.65	390	11.0
IKW20N60H3	TO-247	600.0	20.0	40.0	80.0	-	1.95	0.56	0.24	17.0	11.0	194.0	11.0	120.0	20.0	80.0	1.65	390	11.0
IKW30N60H3	TO-247	600.0	30.0	60.0	120.0	-	1.95	0.94	0.44	21.0	33.0	207.0	22.0	165.0	30.0	120.0	1.65	320	12.0
IKW40N60H3	TO-247	600.0	40.0	80.0	160.0	-	1.95	1.1	0.58	19.0	33.0	197.0	21.0	223.0	40.0	160.0	1.65	810	13.6
IKW50N60H3	TO-247	600.0	50.0	100.0	200.0	-	1.85	1.45	0.91	23.0	37.0	235.0	24.0	315.0	60.0	200.0	1.65	880	16.9
IKW60N60H3	TO-247	600.0	60.0	80.0	180.0	416.0	1.85	2.1	1.13	25.0	39.0	291.0	23.0	375.0	80.0	90.0	1.65	1200	23.0
IKW75N60H3	TO-247	600.0	75.0	80.0	225.0	-	1.85	3.0	1.7	31.0	60.0	265.0	27.0	470.0	80.0	150.0	1.65	1800	19.0
Switching frequency: RC drives fast series 4-30 kHz																			
IKD10N60RF	DPAK (TO-252)	600.0	10.0	20.0	30.0	-	2.2	0.19	0.16	12.0	15.0	168.0	18.0	64.0	20.0	30.0	2.1	270	9.1
IKD15N60RF	DPAK (TO-252)	600.0	15.0	30.0	45.0	-	2.2	0.27	0.25	13.0	15.0	160.0	17.0	90.0	30.0	45.0	2.1	420	13.2
IKD03N60RF	DPAK (TO-252)	600.0	2.5	5.0	7.5	53.6	2.2	0.05	0.04	9.0	8.0	142.0	123.0	17.1	5.0	7.5	2.1	60	6.2
IKD04N60RF	DPAK (TO-252)	600.0	4.0	8.0	12.0	75.0	2.2	0.06	0.05	12.0	7.0	116.0	37.0	27.0	8.0	12.0	2.1	90	4.6
IKD06N60-RF	DPAK (TO-252)	600.0	6.0	12.0	18.0	-	2.2	0.09	0.09	7.0	8.0	106.0	22.0	48.0	12.0	18.0	2.1	160	7.4
Switching frequency: RC drives series 2-20 kHz																			
IKD10N60R	DPAK (TO-252)	600.0	10.0	20.0	30.0	150.0	1.65	0.21	0.38	14.0	10.0	192.0	139.0	64.0	20.0	30.0	1.7	560	20.3
IKD15N60R	DPAK (TO-252)	600.0	15.0	30.0	45.0	250.0	1.65	0.37	0.53	16.0	10.0	183.0	136.0	90.0	30.0	45.0	1.7	760	27.0
IKD04N60R	DPAK (TO-252)	600.0	4.0	8.0	12.0	75.0	1.65	0.09	0.15	14.0	8.0	146.0	171.0	27.0	8.0	12.0	1.7	220	11.0
IKD06N60R	DPAK (TO-252)	600.0	6.0	12.0	18.0	100.0	1.65	0.11	0.22	12.0	7.0	127.0	152.0	48.0	12.0	18.0	1.7	370	12.0

Bare dies

Discrete

IGBT modules

IPMs

Stacks & boards

Driver & controller

SiC

Presspacks

SCR / diode modules

Solid state relays

Discrete IGBT with anti-parallel diode

Product	Package	V _{CE} max [V]	I _C (@ 100°) max [A]	I _C (@ 25°) max [A]	I _{Cpuls} max [A]	P _{tot} max [W]	V _{CE(sat)} [V]	E _{on} [mJ]	E _{off} [mJ]	t _{d(on)} [ns]	t _r [ns]	t _{d(off)} [ns]	t _f [ns]	Q _{Gate} [nC]	I _F max [A]	I _{Fpuls} max [A]	V _F [V]	Q _{rr} [nC]	I _{rrm} [A]
Switching frequency: RC soft switching series 8-60 kHz																			
IHW30N110R3	TO-247	1100.0	30.0	60.0	90.0	-	1.55	-	1.15	-	-	350.0	16.0	180.0	60.0	90.0	1.35	-	-
IHW15N120R3	TO-247	1200.0	15.0	30.0	45.0	-	1.48	-	0.7	-	-	300.0	46.0	165.0	30.0	45.0	1.55	-	-
IHW15T120	TO-247	1200.0	15.0	30.0	45.0	113.0	2.2	2.0	2.1	50.0	35.0	600.0	120.0	85.0	23.0	36.0	1.7	950.0	13.3
IHW20N120R3	TO-247	1200.0	20.0	40.0	60.0	-	1.48	-	0.95	0.0	0.0	387.0	25.0	211.0	40.0	40.0	1.55	-	0.0
IHW20N120R5	TO-247	1200.0	20.0	40.0	60.0	288.0	1.55	-	0.75	-	-	350.0	90.0	170.0	40.0	60.0	1.6	-	-
IHW25N120R2	TO-247	1200.0	25.0	50.0	75.0	365.0	1.6	-	2.54	-	-	373.0	55.8	60.7	25.0	75.0	1.8	-	-
IHW30N120R2	TO-247	1200.0	30.0	60.0	90.0	390.0	2.0	-	3.1	-	-	860.0	40.0	198.0	30.0	90.0	1.75	-	-
IHW30N120R3	TO-247	1200.0	30.0	60.0	90.0	349.0	1.55	-	1.47	-	-	326.0	39.0	263.0	60.0	90.0	1.6	-	-
IHW40N120R3	TO-247	1200.0	40.0	80.0	120.0	-	1.55	-	2.02	-	-	336.0	38.0	335.0	80.0	120.0	1.6	-	-
IHW40T120	TO-247	1200.0	40.0	75.0	105.0	270.0	2.3	5.0	5.4	52.0	40.0	580.0	120.0	203.0	31.0	47.0	1.7	3540.0	25.3
IHW20N135R3	TO-247	1350.0	20.0	40.0	60.0	-	1.6	-	1.3	-	-	335.0	50.0	195.0	40.0	60.0	1.6	-	-
IHW20N135R5	TO-247	1350.0	20.0	40.0	60.0	288.0	1.65	-	0.95	-	-	235.0	50.0	170.0	40.0	60.0	1.65	-	-
IHW30N135R3	TO-247	1350.0	30.0	60.0	90.0	349.0	1.65	-	1.93	-	-	337.0	47.0	263.0	60.0	90.0	1.65	-	-
IHW40N135R3	TO-247	1350.0	40.0	80.0	120.0	429.0	1.65	-	2.5	-	-	343.0	98.0	365.0	80.0	120.0	1.65	-	-
IHW30N160R2	TO-247	1600.0	30.0	60.0	90.0	312.0	2.35	-	4.37	-	-	564.0	111.0	94.0	30.0	90.0	2.0	-	-
IHW40N60R	TO-247	600.0	40.0	80.0	120.0	-	1.65	0.0	0.75	0.0	0.0	193.0	24.0	223.0	40.0	120.0	1.65	-	-
Switching frequency: RC-fast soft switching series 20-100 kHz																			
IHW40N60RF	TO-247	600.0	40.0	80.0	120.0	-	1.85	-	0.56	-	-	175.0	14.0	220.0	80.0	120.0	1.75	-	-
Switching frequency: RC-H5 series 20-150 kHz																			
IHW20N65R5	TO-247	650.0	20.0	40.0	60.0	150.0	1.35	0.54	0.16	23.0	16.0	250.0	7.0	97.0	19.0	60.0	1.7	1550	29.0
IHW30N65R5	TO-247	650.0	30.0	60.0	90.0	176.0	1.35	0.85	0.24	29.0	17.0	220.0	8.0	153.0	23.0	42.0	1.7	1900	28.0
IHW40N65R5	TO-247	650.0	40.0	80.0	120.0	230.0	1.35	1.1	0.37	34.0	25.0	260.0	13.0	193.0	32.0	120.0	1.7	2750	37.2
IHW50N65R5	TO-247	650.0	50.0	80.0	150.0	282.0	1.35	1.5	0.45	30.0	20.0	210.0	8.0	230.0	37.0	150.0	1.7	2750	37.0

Discrete IGBT with anti-parallel diode

Product	Package	V _{CE} max [V]	I _C (@ 100°) max [A]	I _C (@ 25°) max [A]	I _{Cpuls} max [A]	P _{tot} max [W]	V _{CE(sat)} [V]	E _{on} [mJ]	E _{off} [mJ]	t _{d(on)} [ns]	t _r [ns]	t _{d(off)} [ns]	t _f [ns]	Q _{Gate} [nC]	I _F max [A]	I _{Fpuls} max [A]	V _F [V]	Q _{rr} [nC]	I _{rrm} [A]
Switching frequency: TRENCHSTOP™ 2-20 kHz																			
IHW30N100T	TO-247	1000.0	30.0	60.0	90.0	412.0	1.55	2.1	1.6	50.0	25.0	550.0	35.0	-	12.0	36.0	1.1	-	-
IKW15T120	TO-247	1200.0	15.0	30.0	45.0	110.0	2.2	2.0	2.1	50.0	35.0	600.0	120.0	85.0	30.0	45.0	1.7	1900	17.0
IKW25T120	TO-247	1200.0	25.0	50.0	75.0	190.0	2.2	3.0	4.0	50.0	32.0	660.0	130.0	155.0	50.0	105.0	1.75	2300	21.0
IKW40T120	TO-247	1200.0	40.0	75.0	105.0	270.0	2.3	5.0	5.4	52.0	40.0	580.0	120.0	203.0	80.0	105.0	1.75	3800	2.8
IKW08T120	TO-247	1200.0	8.0	16.0	24.0	70.0	2.2	1.08	1.2	40.0	26.0	570.0	140.0	53.0	16.0	24.0	1.7	1000	13.0
IKQ100N60T	TO-247PLUS-3	600.0	100.0	160.0	400.0	714.0	1.5	3.1	2.5	30.0	38.0	290.0	31.0	610.0	160.0	400.0	1.65	2800	23.0
IKQ120N60T	TO-247PLUS-3	600.0	120.0	160.0	480.0	833.0	1.5	6.2	5.9	50.0	75.0	565.0	68.0	703.0	160.0	480.0	1.65	3400	26.5
IKB20N60T	D2PAK (TO-263)	600.0	15.0	30.0	60.0	166.0	1.5	0.31	0.46	18.0	14.0	199.0	42.0	120.0	30.0	45.0	1.65	310	10.4
IKB10N60T	D2PAK (TO-263)	600.0	18.0	24.0	30.0	110.0	1.5	0.16	0.27	12.0	8.0	215.0	38.0	62.0	20.0	30.0	1.6	380	10.0
IKP10N60T	TO-220	600.0	18.0	24.0	30.0	-	1.5	0.16	0.27	12.0	8.0	215.0	38.0	67.0	24.0	30.0	1.6	380	10.0
IKB15N60T	D2PAK (TO-263)	600.0	23.0	26.0	45.0	130.0	1.5	0.22	0.35	17.0	11.0	188.0	50.0	87.0	30.0	45.0	1.65	240	10.4
IKP15N60T	TO-220	600.0	23.0	26.0	45.0	-	1.5	0.22	0.35	17.0	11.0	188.0	50.0	87.0	26.0	45.0	1.65	240	10.4
IKP20N60T	TO-220	600.0	28.0	41.0	60.0	-	1.5	0.31	0.46	18.0	14.0	199.0	42.0	120.0	41.0	60.0	1.65	310	13.3
IKW20N60T	TO-247	600.0	28.0	41.0	60.0	166.0	1.5	0.31	0.46	18.0	14.0	199.0	42.0	120.0	40.0	60.0	1.65	310	13.3
IHW30N60T	TO-247	600.0	30.0	60.0	90.0	187.0	1.5	-	0.8	23.0	21.0	254.0	46.0	167.0	13.0	30.0	1.1	-	-
IKW30N60T	TO-247	600.0	39.0	45.0	90.0	187.0	1.5	1.0	1.1	23.0	21.0	254.0	46.0	167.0	60.0	90.0	1.65	920	16.3
IKP04N60T	TO-220	600.0	4.0	8.0	12.0	-	1.5	0.06	0.08	14.0	7.0	164.0	43.0	27.0	8.0	12.0	1.65	79	5.3
IHW40T60	TO-247	600.0	40.0	80.0	120.0	-	1.55	0.0	0.92	0.0	0.0	186.0	66.3	215.0	30.0	90.0	1.65	0.92	16.3
IKW50N60T	TO-247	600.0	50.0	80.0	150.0	333.0	1.5	1.2	1.4	26.0	29.0	299.0	29.0	310.0	100.0	150.0	1.65	1800	27.7
IKB06N60T	D2PAK (TO-263)	600.0	6.0	12.0	18.0	88.0	1.5	0.09	0.11	9.0	6.0	130.0	58.0	42.0	12.0	18.0	1.6	190	5.3
IKP06N60T	TO-220	600.0	6.0	12.0	18.0	-	1.5	0.09	0.11	9.0	6.0	130.0	58.0	42.0	12.0	18.0	1.6	190	5.3
IKA06N60T	TO-220	600.0	6.2	10.0	18.0	-	1.5	0.09	0.11	9.0	6.0	130.0	58.0	42.0	10.2	18.0	0.1	190	5.3
IKA10N60T	TO-220	600.0	7.2	11.7	30.0	-	1.5	0.16	0.27	12.0	8.0	215.0	35.0	67.0	11.9	30.0	1.6	380	13.0
IKW75N60T	TO-247	600.0	75.0	80.0	225.0	428.0	1.5	2.9	2.9	33.0	36.0	330.0	35.0	470.0	80.0	225.0	1.65	2400	38.5
IKA15N60T	TO-220	600.0	8.9	14.7	45.0	-	1.5	0.22	0.35	17.0	11.0	188.0	50.0	87.0	15.5	45.0	1.65	240	10.4
IHW30N90T	TO-247	900.0	30.0	60.0	90.0	428.0	1.5	-	1.8	45.0	26.0	556.0	29.0	280.0	13.0	36.0	1.1	-	-
IKW15N120T2	TO-247	1200.0	15.0	30.0	60.0	235.0	2.2	1.5	1.3	31.0	30.0	450.0	176.0	93.0	25.0	60.0	1.75	1300	13.0
IKW25N120T2	TO-247	1200.0	25.0	50.0	100.0	349.0	2.2	2.25	2.05	25.0	24.0	340.0	164.0	120.0	40.0	100.0	1.65	2050	24.0
IKW40N120T2	TO-247	1200.0	40.0	75.0	160.0	480.0	2.3	4.5	3.8	32.0	28.0	405.0	195.0	192.0	75.0	160.0	1.75	3300	31.0

Bare dies

Discrete

IGBT modules

IPMs

Stacks & boards

Driver & controller

SiC

Presspacks

SCR / diode modules

Solid state relays

Discrete IGBT with anti-parallel diode

Product	Package	V _{CE} max [V]	I _C (@ 100°) max [A]	I _C (@ 25°) max [A]	I _{Cpuls} max [A]	P _{tot} max [W]	V _{CE(sat)} [V]	E _{on} [mJ]	E _{off} [mJ]	t _{d(on)} [ns]	t _r [ns]	t _{d(off)} [ns]	t _f [ns]	Q _{Gate} [nC]	I _F max [A]	I _{Fpuls} max [A]	V _F [V]	Q _{rr} [nC]	I _{rrm} [A]
Switching frequency: TRENCHSTOP™5 20-60 kHz																			
IKW30N65WR5	TO-247	650.0	30.0	60.0	90.0	185.0	1.4	0.99	0.33	39.0	12.0	367.0	9.0	155.0	24.0	45.0	1.4	1250	22.0
IKW40N65WR5	TO-247	650.0	40.0	80.0	120.0	230.0	1.4	1.4	0.42	40.0	29.0	402.0	11.0	193.0	32.0	120.0	1.4	1650	27.0
IKW50N65WR5	TO-247	650.0	50.0	80.0	150.0	282.0	1.4	1.85	0.7	46.0	33.0	400.0	20.0	230.0	37.0	150.0	1.4	1800	29.0
Switching frequency: TRENCHSTOP™5 30-100 kHz																			
IKP08N65H5	TO-220	650.0	11.0	18.0	24.0	70.0	1.65	0.07	0.03	11.0	5.0	115.0	15.0	22.0	20.0	24.0	1.45	130	6.8
IKP15N65H5	TO-220	650.0	18.0	30.0	45.0	105.0	1.65	0.12	0.05	17.0	7.0	160.0	10.0	38.0	20.0	45.0	1.45	200	8.0
IKP20N65H5	TO-220	650.0	21.0	42.0	60.0	125.0	1.65	0.17	0.06	16.0	3.0	168.0	36.0	48.0	20.0	60.0	1.65	270	10.04
IKP30N65H5	TO-220	650.0	35.0	55.0	90.0	188.0	1.65	0.28	0.1	18.0	4.0	180.0	22.0	70.0	36.0	90.0	1.35	410	14.3
IKW30N65H5	TO-247	650.0	35.0	55.0	90.0	188.0	1.65	0.28	0.1	20.0	11.0	190.0	19.0	70.0	30.0	54.0	1.55	410	11.5
IKP40N65H5	TO-220	650.0	46.0	74.0	120.0	255.0	1.65	0.39	0.12	22.0	12.0	165.0	13.0	95.0	36.0	120.0	1.45	450	12.5
IKW40N65H5	TO-247	650.0	46.0	74.0	120.0	255.0	1.65	0.39	0.12	22.0	12.0	165.0	13.0	95.0	36.0	120.0	1.45	450	12.5
IKW50N65EH5	TO-247	650.0	50.0	80.0	200.0	275.0	1.65	1.5	0.5	25.0	29.0	172.0	35.0	120.0	80.0	200.0	1.35	1100	17.0
IKZ50N65EH5	TO-247-4	650.0	54.0	85.0	200.0	273.0	1.65	0.41	0.19	20.0	7.0	250.0	21.0	109.0	95.0	200.0	1.35	820	24.0
IKZ50N65NH5	TO-247-4	650.0	54.0	85.0	200.0	273.0	1.65	0.35	0.2	22.0	8.0	252.0	23.0	109.0	79.0	200.0	1.6	490	22.0
IKW50N65H5	TO-247	650.0	56.0	80.0	150.0	305.0	1.65	0.52	0.18	21.0	15.0	180.0	18.0	120.0	40.0	150.0	1.45	570	16.7
IKA08N65H5	TO220-3 FP	650.0	6.8	10.8	24.0	31.2	1.65	0.07	0.03	11.0	5.0	115.0	15.0	22.0	12.3	24.0	1.45	130	6.8
IKW75N65EH5	TO-247	650.0	75.0	90.0	300.0	395.0	1.65	2.3	0.9	28.0	33.0	174.0	41.0	160.0	90.0	300.0	1.35	1330	20.5
IKZ75N65EH5	TO-247-4	650.0	75.0	90.0	300.0	395.0	1.65	0.68	0.43	26.0	11.0	347.0	15.0	166.0	95.0	300.0	1.35	1020	29.0
IKZ75N65NH5	TO-247-4	650.0	75.0	90.0	300.0	395.0	1.65	0.88	0.52	52.0	19.0	412.0	19.0	166.0	95.0	219.0	1.6	570	26.0
IKA15N65H5	TO220-3 FP	650.0	8.5	14.0	45.0	33.3	1.65	0.12	0.05	17.0	7.0	160.0	10.0	38.0	12.3	45.0	1.45	200	8.0
Switching frequency: TRENCHSTOP™5 50Hz -20 kHz																			
IKZ75N65EL5	TO-247-4	650.0	100.0	100.0	300.0	536.0	1.1	1.57	3.2	120.0	23.0	275.0	50.0	436.0	90.0	300.0	1.4	1300	37.0
IKW30N65EL5	TO-247	650.0	62.0	85.0	120.0	227.0	1.05	0.47	1.35	33.0	11.0	308.0	51.0	168.0	50.0	120.0	1.35	910	21.0
IKW30N65NL5	TO-247	650.0	62.0	85.0	120.0	227.0	1.05	0.56	1.35	59.0	20.0	283.0	67.0	168.0	50.0	120.0	1.65	480	18.0
IKW75N65EL5	TO-247	650.0	80.0	80.0	300.0	536.0	1.1	1.61	3.2	40.0	11.0	275.0	50.0	436.0	90.0	300.0	1.4	1370	29.0

Discrete IGBT with anti-parallel diode

Product	Package	V _{CE} max [V]	I _C (@ 100°) max [A]	I _C (@ 25°) max [A]	I _{Cpuls} max [A]	P _{tot} max [W]	V _{CE(sat)} [V]	E _{on} [mJ]	E _{off} [mJ]	t _{d(on)} [ns]	t _r [ns]	t _{d(off)} [ns]	t _f [ns]	Q _{Gate} [nC]	I _F max [A]	I _{Fpuls} max [A]	V _F [V]	Q _{rr} [nC]	I _{rrm} [A]
Switching frequency: TRENCHSTOP™5 60-120 kHz																			
IKP08N65F5	TO-220	650.0	11.0	18.0	24.0	70.0	1.6	0.07	0.02	116.0	5.0	116.0	20.0	22.0	20.0	24.0	1.45	140	6.6
IKP15N65F5	TO-220	650.0	18.0	30.0	45.0	105.0	1.6	0.13	0.04	17.0	7.0	150.0	16.0	38.0	20.0	45.0	1.45	190	8.0
IKP20N65F5	TO-220	650.0	21.0	42.0	60.0	125.0	1.6	0.16	0.06	18.0	3.0	170.0	30.0	48.0	20.0	60.0	1.65	280	10.25
IKP30N65F5	TO-220	650.0	35.0	55.0	90.0	188.0	1.6	0.28	0.07	18.0	4.0	174.0	15.0	70.0	36.0	90.0	1.35	410	14.4
IKP40N65F5	TO-220	650.0	46.0	74.0	120.0	255.0	1.6	0.36	0.1	19.0	13.0	160.0	16.0	95.0	36.0	120.0	1.45	450	12.4
IKW40N65F5	TO-247	650.0	46.0	74.0	120.0	255.0	1.6	0.36	0.1	19.0	13.0	160.0	16.0	95.0	36.0	120.0	1.45	450	12.4
IKW50N65F5	TO-247	650.0	56.0	80.0	150.0	305.0	1.6	0.49	0.16	21.0	15.0	175.0	18.0	120.0	40.0	150.0	1.45	550	16.5
IKA08N65F5	TO220-3 FP	650.0	6.8	10.8	24.0	31.2	1.6	0.07	0.02	10.0	5.0	116.0	20.0	22.0	12.3	24.0	1.45	140	6.6
IKA15N65F5	TO220-3 FP	650.0	8.5	14.0	45.0	33.3	1.6	0.13	0.04	150.0	7.0	150.0	16.0	38.0	12.3	45.0	1.45	190	8.0
Switching frequency: TRENCHSTOP™5 S5 10-30 kHz																			
IKW30N65ES5	TO-247	650.0	39.5	62.0	120.0	188.0	1.35	0.56	0.32	17.0	12.0	124.0	30.0	70.0	40.0	120.0	1.45	830	18.0
IKW40N65ES5	TO-247	650.0	50.0	79.0	160.0	230.0	1.35	0.86	0.4	19.0	18.0	130.0	23.0	95.0	79.0	160.0	1.45	1100	23.0
IKW50N65ES5	TO-247	650.0	60.5	80.0	200.0	274.0	1.35	1.23	0.55	20.0	27.0	127.0	34.0	120.0	80.0	5.0	1.45	1250	25.0
IKW75N65ES5	TO-247	650.0	80.0	80.0	300.0	395.0	1.42	2.4	0.95	40.0	46.0	144.0	41.0	164.0	80.0	300.0	1.5	1800	31.0

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