



Insulated Gate Bipolar Transistors IGBT-Chips

Type	V_{CES}	$V_{CE(sat)}$	βI_C	C_{ies} typ.	t_{in} typ. 25°C	Chip type	Chip size dimensions		Source Φ bond wire recommend	Equivalent device data sheet	Dim. out- line No.	
$T_{amb} = 150^\circ\text{C}$	V	V	A	pF	ns		mm	mils				
Low $V_{CE(sat)}$	IXGD28N30	300	1.8	20	1500	180	IX43	5.64 x 4.67	222 x 184	15 mil x 1	IXGH28N30	1
	IXGD40N30		1.45	20	2500	220	IX57	6.58 x 6.58	259 x 259	20 mil x 1	IXGH40N30	2
	IXGD10N60	600	2.5	10	750	600	IX32	4.39 x 3.60	173 x 142	12 mil x 1	IXGH10N60	3
	IXGD20N60		2.5	20	1500	400	IX43	5.64 x 4.67	222 x 184	15 mil x 1	IXGH20N60	1
	IXGD31N60		1.8	20	1500	800	IX43	5.64 x 4.67	222 x 184	15 mil x 1	IXGH31N60	1
	IXGD30N60		2.3	20	2800	400	IX57	6.58 x 6.58	259 x 259	20 mil x 1	IXGH30N60	2
	IXGD38N60		1.6	20	2500	500	IX57	6.58 x 6.58	259 x 259	20 mil x 1	IXGH38N60	2
	IXGD40N60		2.2	20	4500	400	IX77	8.84 x 7.19	348 x 283	15 mil x 3 Φ	IXGH40N60	4
	IXGD60N60		1.6	20	4000	500	IX77	8.84 x 7.19	348 x 283	15 mil x 3 Φ	IXGH60N60	4
	IXGD200N60		2	20	9000	350	IX92 Φ	12.70 x 12.19	500 x 480	15 mil x 6	IXGN200N60	5
High Speed	IXGD10N100	1000	3.5	10	750	800	IX3T	4.39 x 3.58	173 x 142	12 mil x 1 Φ	IXGH10N100	6
	IXGD12N100		3.5	12	750	800	IX32	4.39 x 3.58	173 x 142	12 mil x 1	IXGH12N100	3
	IXGD17N100		3.5	17	1500	750	IX4T	5.77 x 4.96	227 x 195	15 mil x 1	IXGH17N100	7
	IXGD25N100		3.4	20	2750	800	IX5T	6.73 x 6.61	265 x 260	10 mil x 4	IXGH25N100	8
	IXGD25N120	1200	2.9	20	2750	800	IX5T	6.73 x 6.61	265 x 260	10 mil x 4	IXGH25N120	8
	IXGD28N30A	300	2.1	20	1500	120	IX43	5.64 x 4.67	222 x 184	15 mil x 1	IXGH28N30A	1
	IXGD40N30A		1.75	20	2500	120	IX57	6.58 x 6.58	259 x 259	20 mil x 1	IXGH40N30A	2
	IXGD10N60A	600	3	10	750	300	IX32	4.39 x 3.60	173 x 142	12 mil x 1	IXGH10N60A	3
	IXGD20N60A		3	20	1500	200	IX43	5.64 x 4.67	222 x 184	15 mil x 1	IXGH20N60A	1
	IXGD24N60A		2.7	20	1500	150	IX43	5.64 x 4.67	222 x 184	15 mil x 1	IXGH24N60A	1
	IXGD30N60A		2.8	20	2800	200	IX57	6.58 x 6.58	259 x 259	20 mil x 1	IXGH30N60A	2
	IXGD32N60A		2.7	20	2500	125	IX57	6.58 x 6.58	259 x 259	20 mil x 1	IXGH32N60A	2
	IXGD40N60A		2.4	20	4500	200	IX77	8.84 x 7.19	348 x 283	15 mil x 3 Φ	IXGH40N60A	4
	IXGD50N60A		2.7	20	4000	275	IX77	8.84 x 7.19	348 x 283	15 mil x 3 Φ	IXGH50N60A	4
	IXGD200N60A		2.2	20	9000	200	IX92 Φ	12.70 x 12.19	500 x 480	15 mil x 6	IXGN200N60A	5
IXGD10N100A	1000	4	10	750	500	IX3T	4.39 x 3.58	173 x 142	12 mil x 1 Φ	IXGH10N100A	6	
IXGD12N100A		4	12	750	500	IX32	4.39 x 3.58	173 x 142	12 mil x 1	IXGH12N100A	3	
IXGD17N100A		4	17	1500	450	IX4T	5.77 x 4.96	227 x 195	15 mil x 1	IXGH17N100A	7	
IXGD25N100A		3.9	20	2750	500	IX5T	6.73 x 6.61	265 x 260	10 mil x 4	IXGH25N100A	8	
IXGD25N120A	1200	3.9	20	2750	600	IX5T	6.73 x 6.61	265 x 260	10 mil x 4	IXGH25N120A	8	

Φ Current Mirror and Kelvin need to be connected to Source if not used. Φ Recommended Gate bond wire is 8 mil resp. 6 mil at Φ types

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$T_{amb} = 150^\circ\text{C}$	V	V	A	pF	ns		mm	mils			
IXSD50N60B	600	2.3	20	3850	150	IX7M	8.91 x 7.22	351 x 284	12 mil x 4	IXSK50N60BU1	9
IXGD22N50B	500	2.5	20	1450	80	IX43	5.64 x 4.67	222 x 184	15 mil x 1	IXGH22N50B	1
IXGD24N50B		2.3	20	1500	120	IX43	5.64 x 4.67	222 x 184	15mil x 1	IXGH24N50B	1
IXGD32N50B		2	20	2500	120	IX57	6.58 x 6.58	259 x 259	20 mil x 1	IXGH32N50B	2
IXGD50N50B		2.1	20	3800	150	IX7Z	8.88 x 7.16	350 x 282	12 mil x 4	IXGH50N50B	10
IXGD20N60B	600	2	20	1500	150	IX43	5.64 x 4.67	222 x 184	15mil x 1	IXGH20N60B	1
IXGD24N60B		2.5	20	1500	120	IX43	5.64 x 4.67	222 x 184	15mil x 1	IXGH24N60B	1
IXGD30N60B		1.6	20	2500	190	IX57	6.58 x 6.58	259 x 259	20 mil x 1	IXGH30N60B	2
IXGD32N60B		2.3	20	2500	120	IX57	6.58 x 6.58	259 x 259	20 mil x 1	IXGH32N60B	2
IXGD50N60B		2.2	20	3800	180	IX7Z	8.88 x 7.16	350 x 282	12 mil x 4	IXGH50N60B	10

Notes:

- Recommended Gate bond wire is 8 mil.
- Maximum switching limits from packaged device data sheet, are not guaranteed.
- Die are tested to $V_{CE(sat)}$ limits as indicated here at $I_C = 20$ A max.
- Element evaluation sample to be built from each lot to test $V_{CE(sat)}$ and switching at full current

- Recommended die processing thermal budget is not to exceed 365 degC for 5 minutes
- Every order will be accompanied by a lot charge for element evaluation.

IXYS reserves the right to change limits, test conditions and dimensions.