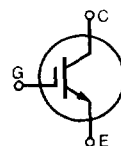


Insulated Gate Bipolar Transistors (IGBT)



SURFACE
MOUNTED DEVICES
AVAILABLE

"S" series with improved SCSOA capability

Type	V_{CES}	I_C	I_C	$V_{CE(sat)}$	C_{iss}	C_{res}	t_{fi}	t_{sc}	R_{thJC}	P_C	Fig. No.	Package style	
$T_{JM} = 150^{\circ}\text{C}$ ► New	V	$T_C = 25^{\circ}\text{C}$	$T_C = 90^{\circ}\text{C}$	V	pF	pF	μs	μs	K/W	W		Outlines on page 33 C = Collector, E = Emitter, G = Gate, KE = Kelvin Emitter	
low $V_{CE(sat)}$	IXSH 20N60 ①	600	40	20	2.5	1800	45	0.4	10	0.83	155	4	Fig. 3 TO-24 SMD Weight = 4 g
	IXSH 30N60		50	30		2800	50	0.4		0.62	200		
	IXSH 40N60		75	40		4500	90	0.4		0.42	300		
	IXSH 25N100	1000	50	25	3.5	2800	50	1.2	10	0.62	200		
High speed	IXSH 45N100		75	45	2.7	4150	60	1.0		0.42	300		
	IXSH 45N120	1200	75	45	3.0	4275	70	1.0	10	0.42	300		
	IXSH 20N60 ①	600	40	20	3.0	1800	45	0.35	10	0.83	150		
	IXSH 30N60		48	24	2.7	1500	35	0.275		0.83	150		
High speed	IXSH 40N60		50	30	3.0	2800	50	0.2		0.62	200		
	IXSH 40N60		75	40	3.0	4500	90	0.2		0.42	300		
	IXSH 25N100	1000	50	25	4.0	2800	50	0.8	10	0.62	200		
	IXSH 45N100		70	35	3.5	4400	85	0.7		0.42	300		
low $V_{CE(sat)}$	IXSH 45N120	1200	70	35	4.0	3750	65	0.7	10	0.42	300		
	IXSH 40N60	1400	70	35	4.0	4150	65	0.4	10	0.42	300		
	IXSM 20N60	600	40	20	2.5	1800	45	0.4	10	0.83	150		
	IXSM 30N60		50	30		2800	50	0.4		0.62	200		
low $V_{CE(sat)}$	IXSM 40N60		75	40		4500	90	0.4		0.42	300	5a	Fig. 5a TO-24 AE Weight = 12 g
	IXSM 25N100	1000	50	25	3.5	2800	50	1.2	10	0.62	200		
	IXSM 45N100		75	45	2.7	4150	60	1.0		0.42	300		
	IXSM 45N100A	600	40	20	3.0	1800	45	0.2	10	0.83	150		
High speed	IXSM 30N60A		50	30		2800	50	0.2		0.62	200		
	IXSM 40N60A		75	40		4500	90	0.2		0.42	300		
	IXSM 25N100A	1000	50	25	4.0	2800	50	0.8	10	0.62	200		
	IXSM 45N100A		70	35	3.5	4400	85	0.7		0.42	300		

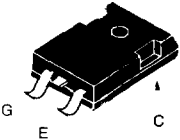


Diagram of TO-24 SMD package showing pins G, E, and C.

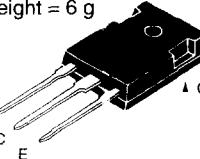


Diagram of TO-24 AD package showing pins G, C, and E.

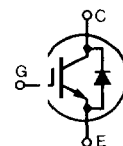
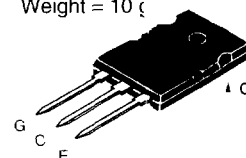
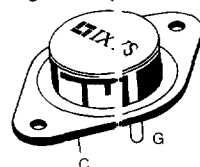
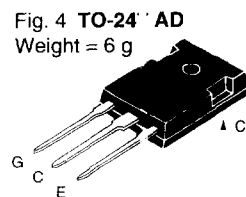
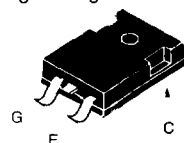
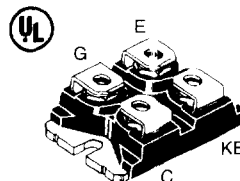


Fig. 7 SOT-227B min iBLOC
Weight = 30 g



High Voltage BIMOSFET™

IXBH 40N140A	1400	40	20	6.0	3275	28	0.14	-	0.42	300	4
IXBH 40N160A	1600										

IGBT with Diode, Combi Pack

"S" series with improved SCSOA-capability

low $V_{CE(sat)}$	IXSH 20N60U1 ① IXSH 30N60U1	600	40 50	20 30	2.5	1800 2800	45 50	0.35 0.4	10 10	0.83 0.62	150 200	4
High speed	IXSH 20N60AU1 ①	600	40	20	3.0	1800	45	0.35	10	0.83	150	3
	IXSH 30N60AU1		48	24	2.7	1500	35	0.275		0.83	150	
	IXSH 40N60AU1		50	30	3.0	2800	50	0.2		0.62	200	
	IXSH 40N60AU1	600	75	50	2.7	4500	90	0.4	10	0.42	300	
	IXSH 40N60AU1	1200	70	35	4.0	3900	80	0.5	10	0.42	300	
low $V_{CE(sat)}$	IXSN 62N60U1 ②	600	90	50	2.5	4500	90	0.4	10	0.50	250	7
	IXSN 35N100U1	1000	38	25	3.5	4500	90	2.0	10	0.61	205	
	IXSN 62N60U1 ②	600	80	40	3.0	4500	90	0.2	10	0.50	250	
	IXSN 35N100U1		100	50	3.0	8500	120	0.45		0.25	500	
	IXSN 62N60U1 ②	1200	70	35	4.0	3900	80	0.5	10	0.42	300	
High speed	IXSN 35N100U1		110	55		7600	120	0.7		0.25	500	
	IXSN 62N60U1 ②											
	IXSN 35N100U1											
	IXSN 62N60U1 ②											
	IXSN 35N100U1											

① Not for new design. Will be replaced by IXSH 24.

② Either Emitter terminal can be used as Kelvin or Main