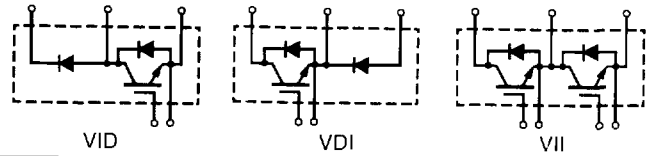
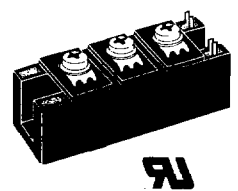
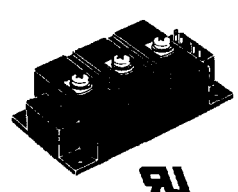


IGBT Modules



High Short Circuit SOA Capability

Type ①	V_{CES} V	I_c			$V_{CE(sat)}$ typ. V	E_{on} ①		$R_{th(jc)}$ max. K/W	P_c max. W	Package style Outlines Page 42
		$T_{JM} = 150^\circ C$	$T_c = 25^\circ C$	$T_c = 80^\circ C$		$T_c = 100^\circ C$	typ. 125°C mJ			
low $V_{CE(sat)}$ VII 50-12G3 VII 75-12G3 VII 100-12G3	1200	50	-	49	2.6	10	18	0.35	360	Fig. 33 Weight = 130 g
		75	-	56	2.9	12	22	0.31	400	
		100	-	75	2.9	20	29	0.23	540	
High speed VII 50-12S3 VII 75-12S3 VII 100-12S3	1200	50	-	45	3.4	8	8	0.31	400	
		75	-	64	3.4	12	12	0.22	570	
		100	-	68	3.7	20	14	0.21	600	
VID 50-12S3 VID 75-12S3 VID 100-12S3	1200	50	-	45	3.4	8	8	0.31	400	
		75	-	64	3.4	12	12	0.22	570	
		100	-	68	3.7	20	14	0.21	600	
VDI 50-12S3 VDI 75-12S3 VDI 100-12S3	1200	50	-	45	3.4	8	8	0.31	400	
		75	-	64	3.4	12	12	0.22	570	
		100	-	68	3.7	20	14	0.21	600	
low $V_{CH(sat)}$ VII 100-12G4 VII 125-12G4 VII 150-12G4 VII 200-12G4	1200	100	84	-	2.6	16	29	0.20	625	Fig. 34 Weight = 250 g
		125	110	-	2.9	16	37	0.15	830	
		150	129	-	2.8	20	46	0.13	960	
		200	153	-	2.9	29	58	0.11	1130	
High speed VII 100-12S4 VII 125-12S4 VII 150-12S4 VII 200-12S4	1200	100	90	-	3.4	14	14	0.20	625	
		125	119	-	3.7	16	18	0.15	850	
		150	138	-	3.7	20	23	0.13	950	
		200	168	-	3.7	29	29	0.11	1130	
VID 125-12S4 VID 150-12S4 VID 200-12S4	1200	125	119	-	3.7	16	18	0.15	850	
		150	138	-	3.7	20	23	0.13	950	
		200	168	-	3.7	29	29	0.11	1130	
VDI 125-12S4 VDI 150-12S4 VDI 200-12S4	1200	125	119	-	3.7	16	18	0.15	850	
		150	138	-	3.7	20	23	0.13	950	
		200	168	-	3.7	29	29	0.11	1130	

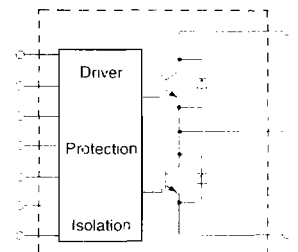
① E_{on} including turn-on energy caused by commutation of free-wheeling diode.

ISOSMART® IGBT Modules

Intelligent Power Modules (IPM) with integrated galvanic isolation interface

Features:

- input logic, isolation, drive circuitry and protection in one package
- ESD protected digital interface
- galvanic isolation, 3 kV_{RMS} between logic and power
- optimized gate drive
- short-circuit and under-voltage protection



Type ①	V_{CES} V	I_c			$V_{CE(sat)}$ typ. V	E_{on} ①		$R_{th(jc)}$ max. K/W	P_c max. W	Package style See outlines Page 42
		$T_{JM} = 150^\circ C$	$T_c = 25^\circ C$	$T_c = 80^\circ C$		typ. 125°C mJ	typ. 125°C mJ			
High speed VIE 100-12S4 VIE 125-12S4 VIE 150-12S4 VIE 200-12S4	1200	100	90	3.4	24.5	22	0.20	625	Fig. 35 Weight = 270 g	
		125	119	3.7	30	27	0.15	830		
		150	138	3.7	37	37	0.13	950		
		200	168	3.7	50	50	0.11	1100		

① E_{on} including turn-on energy caused by commutation of free-wheeling diode.