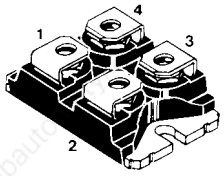
POWER MODULES

SGS-THOMSON MICROELECTRONICS

BIPOLAR IN ISOTOP



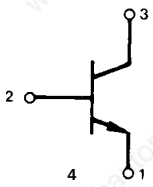
For other conf.

Conf.	Type	V_{CEO}	V_{CEV}	I_C	P_{tot}	$V_{CE\ (sat)}$ @ I_C / I_B			t_s*	t_f*
		(V)	(V)	(A)	(W)	(V)	(A)	(A)	(μs)	(μs)
D	ESM2012DV	120	150	120	175	2	100	1	0.9	0.15
A	BUT30V	125	200	100	250	1.5	100	10	1.0	0.1
A	BUT32V	300	400	80	250	0.9	40	4	1.9	0.12
D	ESM2030DV	300	400	67	150	2.2	56	1.6	2.0	0.35
B	BUT232V	300	400	140	300	1.9	70	7	3.0	0.25
D	ESM3030DV	300	400	100	225	2.2	85	2.4	2.3	0.35
D	ESM3045DV	450	600	24	125	2	20	1.2	2.1	0.15
D	ESM4045DV	450	600	42	150	2	35	2	3.0	0.20
D	ESM5045DV	450	600	60	175	2	50	2.8	3.2	0.25
D	ESM6045DV	450	600	84	250	2	70	4	3.5	0.30
A	BUV98V	450	1000	30	150	1.5	20	4	5	0.4
A	BUV298V	450	850	60	250	2	32	6.4	4.5	0.4
A	BUV98AV	450	1000	30	150	1.5	16	3.2	5	0.4
A	BUV298AV	450	1000	50	250	1.2	32	6.4	4.5	0.4
C	ESM6045AV	450	1000	72	250	2	60	2.4	4.6	0.40
B	BUF460AV	450	1000	80	270	2	60	12	4.5	0.1

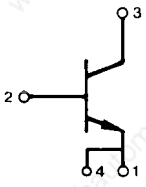
VCE(sat) max @ Tj = 100°

* Inductive load @ Tj = 100° max value

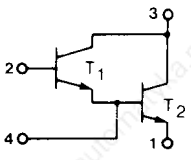
Internal schematic diagrams



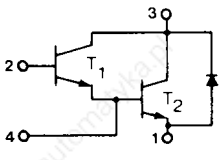
Conf. A



Conf. B



Conf. C



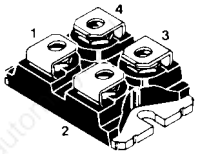
Conf. D

SGS-THOMSON MICROELECTRONICS

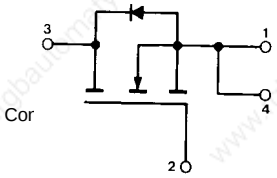
POWER MODULES

POWER MOS/ISOTOP

SCREW VERSION



Internal schematic diagrams



POWER MOS

V_{dss} (V)	$R_{ds(on)}$ (W)	Type	$I_{d(cont)}$ (A)	P_{tot} (W)	I_{AR} T_j=25°C (A)	E_{AS} T_j=25°C (mJ)	E_{AR} T_j=25°C (mJ)	I_{AR} T_j=100°C (A)
60	0.004	STE250N06	250	450	70	900	200	45
100	0.007	STE180N10	180	450	60	720	180	37
100	0.009	STE150N10	150	410	60	720	180	37
200	0.021	STE100N20	100	450	33	810	18	19
250	0.027	STE90N25	90	450	23	800	200	15
400	0.075	STE50N40	50	450	16	435	23	9.5
500	0.085	STE53NA50	53	460	26	1014	384	16
500	0.100	STE47N50	47	450	12	216	96	8
500	0.110	STE45N50	45	450	12	216	96	8
500	0.135	STE38NA50	38	400	19	542	216	12
500	0.140	STE36N50-DK	36	410	14	294	116	8.8
500	0.140	STE36N50-DA	36	410	14	294	116	8.8
600	0.150	STE38N60	38	450	10	150	58	6.2
800	0.400	STE22N80	22	400	7.3	80	30	4.5
900	0.350	STE24N90	24	450	6	54	20	3.7
1000	0.770	STE15N100	15	400	5	38	14.5	3.1