

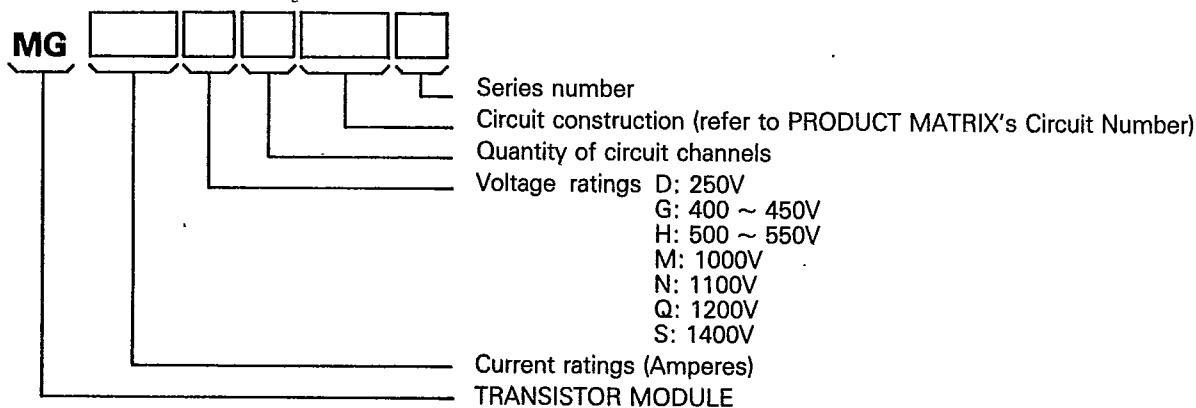
**WESTCODE TRANSISTOR MODULES** are designed for use in various types of motor control and other high power switching applications and consist of insulated type **DARLINGTON TRANSISTORS**. The electrodes are fully isolated from heat sink. Single ended electrode construction is used to greatly simplify mounting. A wide variety of devices are available with current capability up to 400A and voltage rating up to 1400V.

**FEATURES**

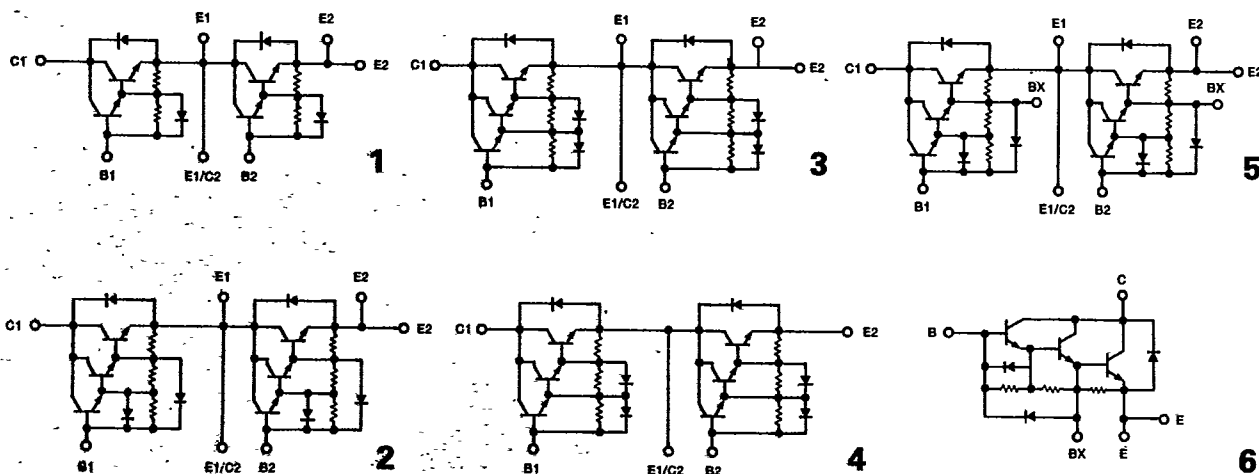
1. Electrodes are isolated from the heat sink (2500V AC).
2. High DC current Gain ( $h_{FE}$ ) (80 or 100 MIN).
3. Low saturation voltage (2 or 2.5V maximum).
4. Wide safe operating area.

**DESIGNATION CODE**

Modules are specified by a type number using the format shown below to indicate the characteristics.



**EQUIVALENT CIRCUITS**



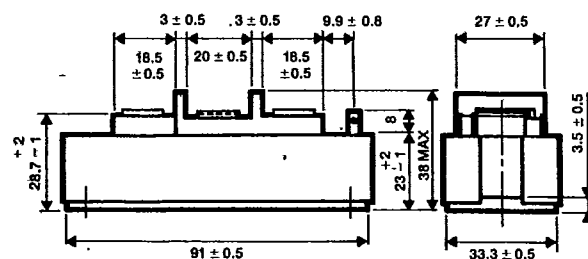
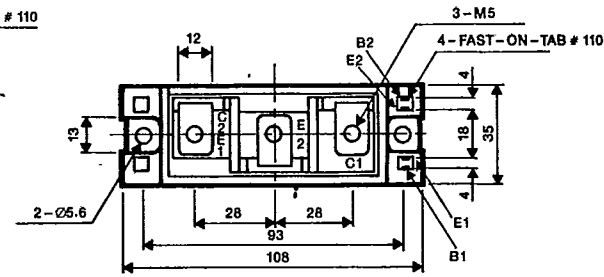
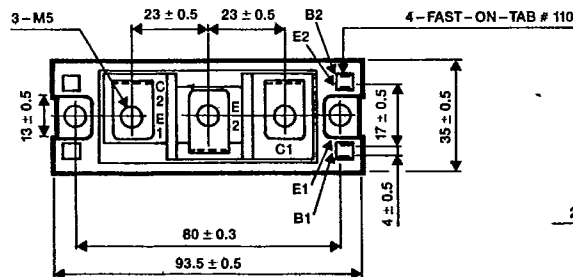
Type	Equiv. Circuit	V <sub>CBO</sub> (V)	V <sub>CEX(sus)</sub> (V)	V <sub>CEO(sus)</sub> (V)	V <sub>EBO</sub> (V)	I <sub>c</sub> (DC) (A)	I <sub>CP</sub> (A) (1msec)	I <sub>F</sub> (DC) (A)	I <sub>FM</sub> (A) (1msec)	I <sub>B</sub> (A)	P <sub>C</sub> (W) Tc25°C	h <sub>FE</sub> min
MG15N2YK1	2	1100	1100	900	7	15	30	15	30	1.5	150	100
MG25M2YK1	3	1000	1000	880	7	25	50	25	50	1.5	300	100
MG25N2YK1	2	1100	1100	900	7	25	50	25	50	2.5	300	100
MG30G2YL1	1	600	600	450	6	30	60	30	60	10	350	100
MG50G2YL1	1	600	600	450	6	50	100	50	100	5	300	100
MG50M2YK1	3	1000	1000	880	7	50	100	50	100	5	350	100
MG50N2YK1	3	1100	1100	900	7	50	100	50	100	5	350	100
MG50Q2YK1	3	1200	1200	900	7	50	100	50	100	5	350	100
MG75G2YL1	1	600	600	450	6	75	150	75	150	10	350	80
MG75M2YK1	4	1000	1000	880	7	75	150	75	150	5	400	100
MG75Q2YK1	2	1200	1200	900	7	75	150	75	150	10	400	100
MG100H2YL1	4	600	600	550	7	100	200	100	200	3	400	200
MG100M2YK1	5	1000	1000	880	7	100	200	100	200	10	700	100
MG100Q2YK1	5	1200	1200	900	7	100	200	100	200	10	700	100
MG150M2YK1	5	1000	1000	880	7	150	300	150	300	15	800	100
MG160Q2YK1	5	1200	1200	900	7	150	300	150	300	20	800	100
MG200M1UK1	6	1000	1000	880	7	200	400	200	400	20	1400	100
MG200Q1UK1	6	1200	1200	900	7	200	400	200	400	20	1400	100
MG300M1UK1	6	1000	1000	880	7	300	600	300	600	30	1600	100
MG300Q1UK1	6	1200	1200	900	7	300	600	300	600	30	1600	100

All Types

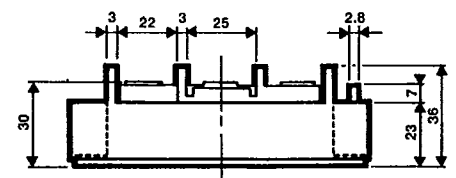
Max. T<sub>j</sub> 150°C  
 Storage Temp. Range -40/+125°C  
 Isolation Voltage 2500V  
 (AC 1 minute)

h<sub>FE</sub> at I<sub>c</sub> = I<sub>c(DC)</sub>  
 V<sub>CE</sub> = 5V T<sub>j</sub> 25°C  
 V<sub>CE(sat)</sub> at I<sub>c</sub> = I<sub>c(DC)</sub>  
 V<sub>BE(sat)</sub> I<sub>B</sub> = 0.02 I<sub>c</sub>  
 T<sub>j</sub> = 25°C

\*\*Screw Torque  
 Terminal M4/M6 Mounting.

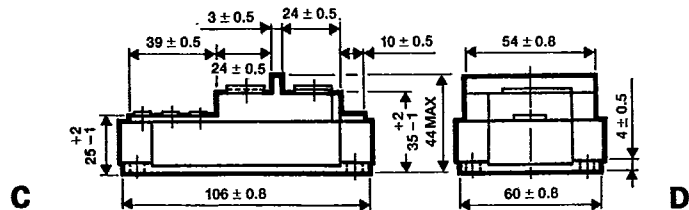
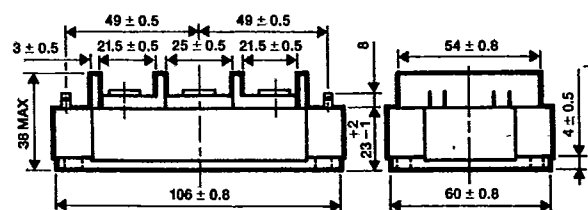
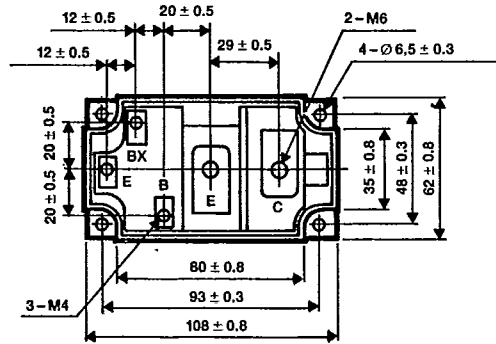
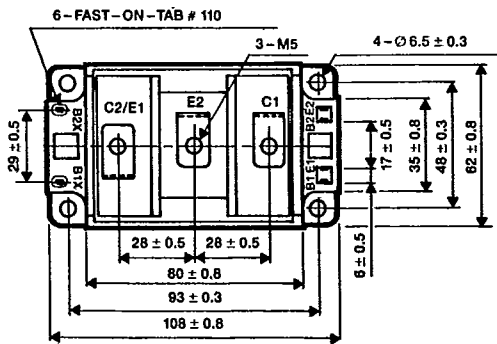


A



B

V <sub>CE(sat)</sub> Max(V)	V <sub>BE(sat)</sub> Max(V)	t <sub>on</sub> (μS) Max	t <sub>s</sub> (μS) Max	t <sub>f</sub> (μS) Max	V <sub>F</sub> (V) Max	t <sub>rr</sub> (μS) Max	R <sub>th(j-s)</sub> °C/W max		Outline Drawing	Screw Torque Terminal Mount Kg.cm
							Transistor	Diode		
2.5	3.5	2.0	11.0	6.0	1.5	1.0	0.83	1.3	A	20/30
2.5	3.5	2.0	15.0	5.0	1.7	1.0	0.41	1.3	A	20/30
2.5	3.5	2.0	14.0	6.0	1.7	1.0	0.41	1.3	A	20/30
2.0	2.5	1.0	12.0	3.0	1.6	1.0	0.625	1.8	A	20/30
2.0	2.5	1.0	12.0	2.0	1.7	2.0	0.41	1.3	A	20/30
2.5	3.5	2.0	15.0	5.0	1.7	1.0	0.35	1.3	A	20/30
2.5	3.5	2.0	15.0	5.0	1.7	1.0	0.35	1.3	A	20/30
2.5	3.5	3.0	15.0	5.0	1.8	1.0	0.35	1.3	A	20/30
2.0	2.5	2.0	12.0	2.0	1.7	2.0	0.36	1.3	A	20/30
2.5	3.5	2.0	15.0	5.0	1.8	1.0	0.31	1.3	B	20/30
2.5	3.5	3.0	15.0	5.0	1.8	1.0	0.31	1.3	B	20/30
2.5	3.5	2.0	12.0	3.0	1.8	0.7	0.31	1.3	C	30/30
2.5	3.5	2.0	15.0	5.0	1.8	1.0	0.179	0.65	C	30/30
2.5	3.5	3.0	15.0	5.0	1.8	1.0	0.179	0.65	C	30/30
2.5	3.5	2.0	15.0	5.0	1.8	1.0	0.156	0.65	C	30/30
2.5	3.5	3.0	15.0	5.0	1.8	1.0	0.156	0.65	C	30/30
2.5	3.5	2.0	15.0	5.0	1.8	1.0	0.089	0.325	D	20/30/30**
2.5	3.5	4.0	15.0	5.0	1.8	1.0	0.089	0.325	D	20/30/30**
2.5	3.5	2.0	15.0	5.0	1.8	1.0	0.078	0.325	D	20/30/30**
2.5	3.5	4.0	15.0	5.0	1.8	1.0	0.078	0.325	D	20/30/30**



4 1021 C-08