

DIODE MODULES

M4.1, M4.1A, M4.1B, M4.1C, M4.1G

25A, 40A, 63A, 80A, 100A, 125A, 160A, 200A, 250A; 12 class

DATASHEET IN BRIEF

A module of single diode is intended for using composed of power converters.

OVERALL DRAWINGS

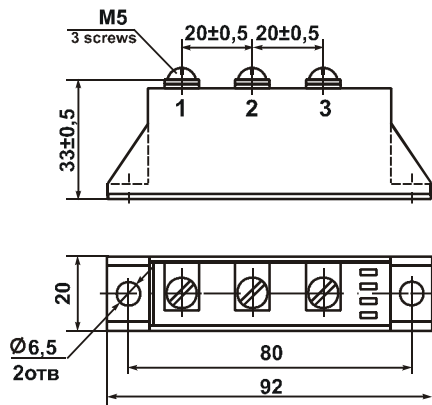


Figure 1 – Overall drawing of housing E1
M4.1, M4.1A; M4.1B, M4.1C, M4.1D – for currents: 25 A – 80 A

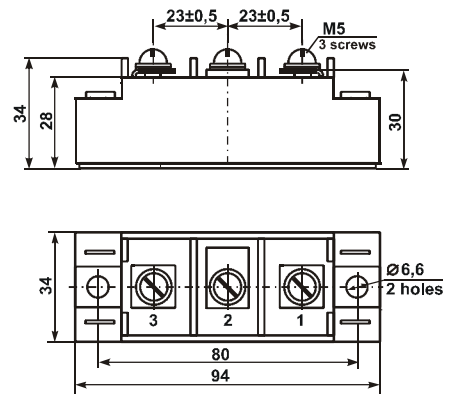


Figure 2– Overall drawing of housing E2
M4.1, M4.1A; M4.1B, M4.1C, M4.1D – for currents: 25A – 160 A

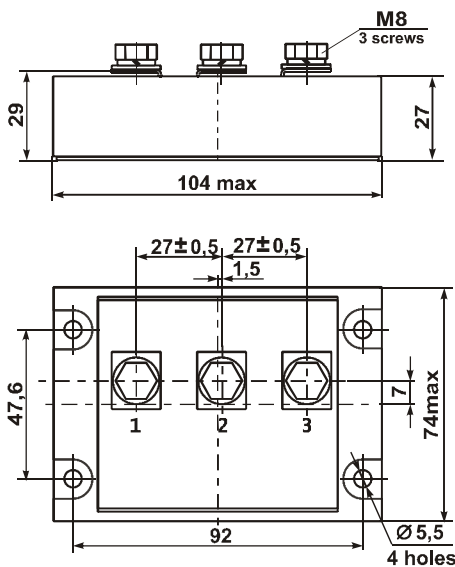


Figure 3 – Overall drawing of housing DM
M4.1, M4.1A; M4.1B, M4.1C, M4.1D – for currents: 200 A

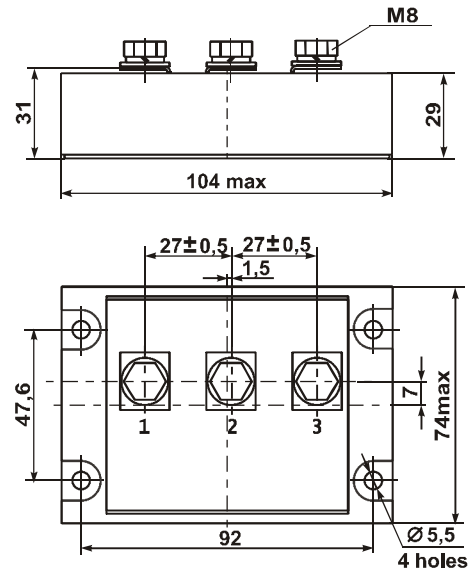


Figure 4 – Overall drawing of housing DM
M4.1, M4.1A; M4.1B, M4.1C, M4.1D – for currents: 250 A

INTERNAL CONNECTION CIRCUITS

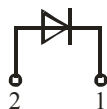


Figure 4 – Connection circuit M4.1

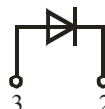


Figure 5 – Connection circuit M4.1A

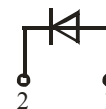


Figure 6 – Connection circuit M4.1B

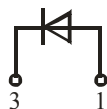


Figure 7 – Connection circuit M4.1C

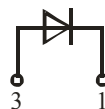


Figure 8 – Connection circuit M4.1G

BASIC CHARACTERISTICS

T = 25 °C

Product name	Pulse direct voltage, U_{FM} , V		Repetitive pulse reverse current, I_{RRM} , mA		Electric isolation strength at DC between radiator and power outputs, U_{ISOL} , V		Thermal junction to cooler resistance, $R_{th(j-c)}$, (°C/W)	
	max	I_O , A amplit. value	max	U_O , V	min	t, minute	max	
M4.1x-25-12	1.65	$\pi \cdot I_{F(AV)}$, 10 ms, 50 Hz, sinus	1.0	1200	4000	1	0.8	
M4.1x-40-12							0.7	
M4.1x-63-12							0.55	
M4.1x-80-12							0.45	
M4.1x-100-12							0.3	
M4.1x-125-12							0.25	
M4.1x-160-12							0.22	
M4.1x-200-12							0.19	
M4.1x-250-12							0.15	

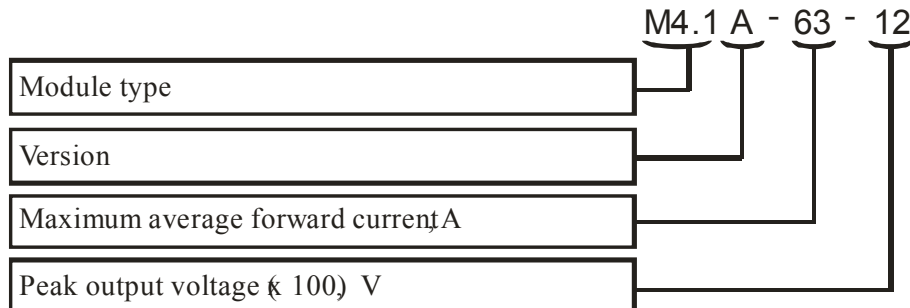
MAXIMUM ALLOWABLE OPERATING MODES

Product name	Non-repetitive pulse reverse voltage U_{RSM} , V	Diode repeti- tive pulse reverse vol- tage/ in off- state, U_{RRM} , V	Diode average DC $I_{F(AV)}$, A	Diode root- mean-square DC I_{FRMS} , A	Diode surge DC $I_{F(SM)}$, A,		Critical rate of rise of on-state current, (di_T / dt) cr, A/ μ s	Junction temperature, T_{VJ}^{**} , °C	
					t, ms	max		min	max
M4.1x-25-12	1300	1200	25	39	200	10	150	- 40	+125
M4.1x-40-12			40	63	560				
M4.1x-63-12			63	95	720				
M4.1x-80-12			80	125	960				
M4.1x-100-12			100	155	1350				
M4.1x-125-12			125	188	2500				
M4.1x-160-12			160	250	4000				
M4.1x-200-12			200	310	5000				
M4.1x-250-12			250	390	6000				

* the modules are designed to operate in equipment with using of coolers that support transition temperature in the prescribed ranges

Precious metals are not contained

MODULE DESCRIPTION



Note – when ordering the module, you must specify the housing type (E1, E2, DM)

5 Naugorskoe shosse, Orel, 302020, Russia Tel. +7(4862) 44-03-44, Fax +7(4862) 47-02-12

E-mail: mail@electrum-av.com