OPTOTHYRISTOR MODULES
MO1-25(40,63,80,100,125,160,200,250)-16; MO1A-25(40,63,80,100,125,160,200,250)-16
TICKET

Thyristor-thyristor module with opto decoupling is designed for using in switch elements of controlled rectifiers, converters (inverters), power regulators for powerful loads of DC and AC.

OVERALL DRAWINGS

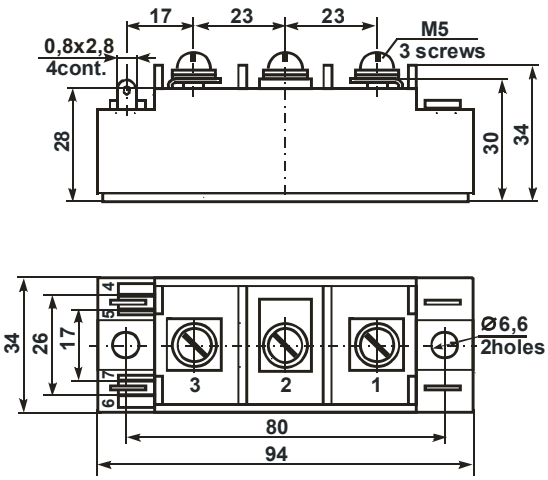

Figure 1

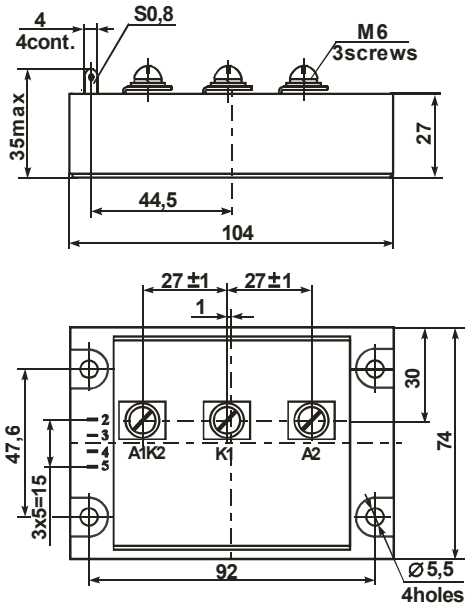

Figure 2– housing DM

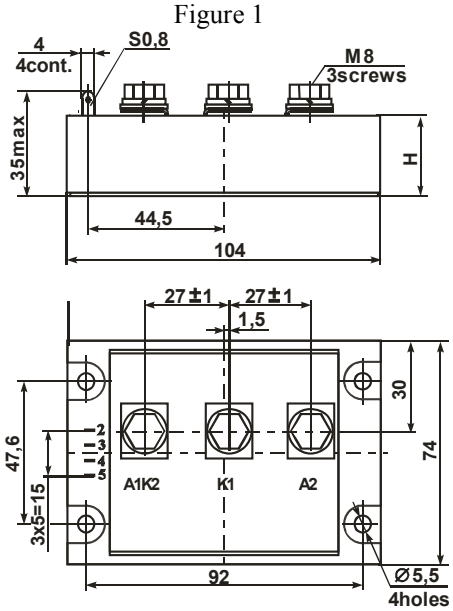

Figure 3– housing DM

Product description	Figure	H, мм
MO1(A)-25-16	1, 4	-
MO1(A)-40-16	1, 4	-
MO1(A)-63-16	1, 4	-
MO1(A)-80-16	1, 4	-
MO1(A)-100-16	1, 4	-
MO1(A)-125-16	1, 4	-
MO1(A)-160-16	1, 4 or 2, 5	-
MO1(A)-200-16	3, 5	27
MO1(A)-250-16	3, 5	29

INTERNAL CONNECTION CIRCUITS

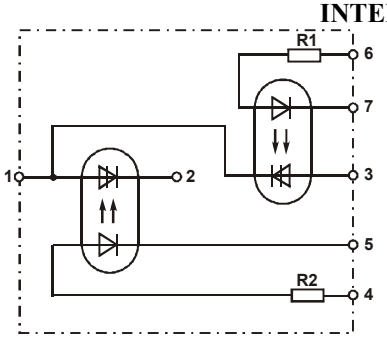

Figure 4

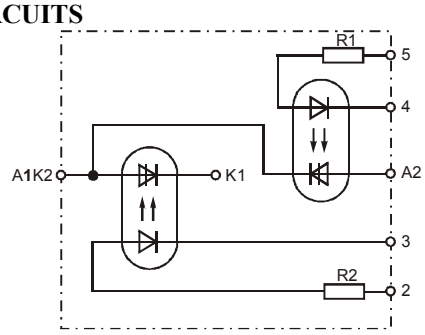

Figure 5

R1, R2– limiting resistors 100 Ω 0.125 W

BASIC CHARACTERISTICS

T = 25 °C

Product name	Pulse open state voltage, U_{TM}, V		Closed state DC/reverse current, I_D / I_R, mA		On state voltage loss on control input, U_{Gon}, V (I_{Gon}=10 mA)	Electric isolation strength at DC, U_{ISOL}, V		Isolation resistance between power outputs and controlling outputs, R_{ISOL}, MOhm		Isolation resistance between power outputs and controlling outputs and radiator housing, $R_{ISOL\ in\text{-}out}$, MΩ		Thermal resistance transition-housing radiator R_{thic}, °C/W
	max	I_{OUT}, A	max	U_{OUT}, V	max	min	t, min	min	U, V	min	U, V	max
MO1-25-16	1.65	79	1	±1600	5.5	4000	1	100	500	10	500	0.8
MO1-40-16		126										0.7
MO1-63-16		198										0.55
MO1-80-16		251										0.45
MO1-100-16		314										0.3
MO1-125-16		393										0.25
MO1-160-16		503										0.22
MO1-200-16		628										0.19
MO1-250-16		785										0.15
Note –module characteristics values of type MO1A are identical to the characteristic values of the corresponding modules MO1												

MAXIMUM ALLOWABLE OPERATING MODES

Product name	Repetitive pulse reverse voltage/ closed state, U_{RRM} / U_{DRM}, V	Average open state current with cooler $I_{T(AV)}$, A, Tc=85 °C	Controlling input current corresponding to on state, I_{Gon}, mA		Controlling pulse input current corresponding to on state, I_{GMon}, mA			Input off state voltage, U_{Goff}, V		Surge on state current*, I_{TSM}, A		Switching voltage, Usw, V		Critical rate of rise of off-state voltage, $(du_d / dt)cr$, V/µs	Critical rate of rise of on-state current, (di_T / dt) cr, A/ µs	Junction temperature, T_{VJ}***, °C	
					Not more	t, µs	Q				t, ms					min	max
	max	max	min	max				min	max	max		min	max				
MO1-25-16	±1600	25	10	25	100	100	10	- 3,5	0,8	200	10	50**	1150	1000	150	-40	+125
MO1-40-16		40								560							
MO1-63-16		63								720							
MO1-80-16		80								960							
MO1-100-16		100								1350							
MO1-125-16		125								2500							
MO1-160-16		160								4000							
MO1-200-16		200								5000							
MO1-250-16		250								6000							

* to thyristor

**10 V – for modules of type MO1A (the value of remaining modes of modules types MO1A are identical with values modes of corresponding modules MO1)

***the modules are designed for operating in the equipment with using of coolers, supporting transition temperature in prescribed ranges

Precious metals are not contained

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