DIODE-THYRISTOR MODULE
MO2-(25, 40, 63, 80, 100, 125, 160, 200, 250)-16; MO2A-(25, 40, 63, 80, 100, 125, 160, 200, 250)-16
DATASHEET IN BRIEF

Diode-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.
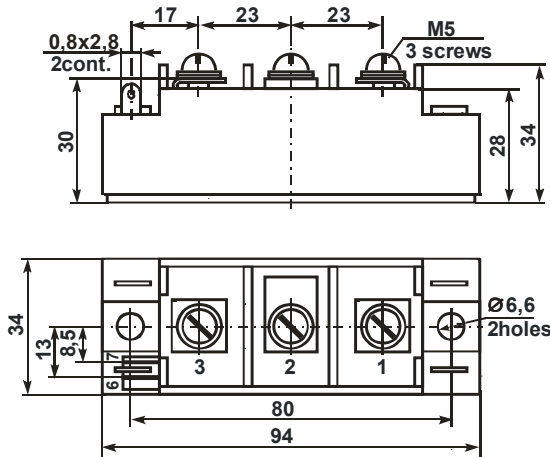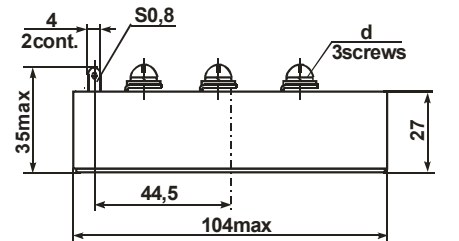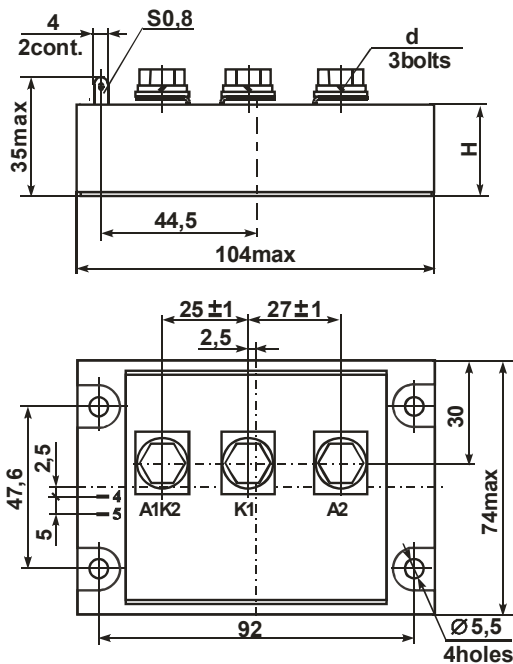
OVERALL DRAWINGS

Figure 1

Figure 2

Figure 3

Product descrip-tion	Figure	H, мм
MO2(A)-25-16	1, 4	-
MO2(A)-40-16	1, 4	-
MO2(A)-63-16	1, 4	-
MO2(A)-80-16	1, 4	-
MO2(A)-100-16	1, 4	-
MO2(A)-125-16	1, 4	-
MO2(A)-160-16	1, 4 or 2, 5	-
MO2(A)-200-16	3, 5	29
MO2(A)-250-16	3, 5	29

INTERNAL CONNECTION CIRCUITS

R1 – resistor 100 Ω,   0.125 W
Figure 4

R1 – resistor100 Ω,   0.125 W
Figure 5

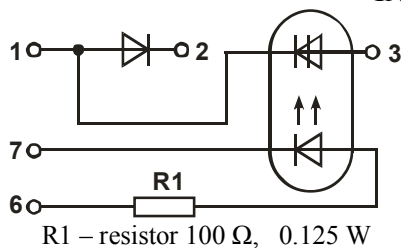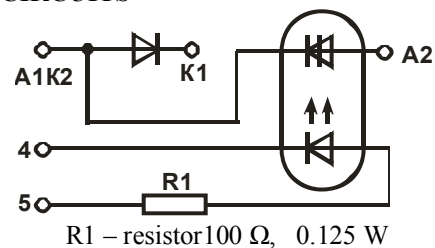**BASIC CHARACTERISTICS**   T = 25 °C

product name	Peak voltage in thyristor on-state / direct diode peak voltage, U_{TM} / U_{FM}, V		Closed state DC/thyristor (diode) reverse current, I_D / I_R, mA		On-state voltage on control input, U_{Gon}, V (I_{Gon}=10 mA)	Isolation resistance between power outputs and controlling outputs, R_{ISOL}, MΩ		Isolation resistance between power outputs and radiator housing, R_{ISOL} in-out, MΩ		Electric isolation strength at DC between radiator and power outputs, U_{ISOL}, V		Thermal resistance transition-housing radiator R_{thic}, °C/W	
		I_{OUT}, A		U_{OUT}, V			U, V		U, V		t, minute	thyristor	diode
	max		max		max	min		min		min		max	max
MO2-25-16		79										0.8	1.2
MO2-40-16		126										0.7	0.9
MO2-63-16		198										0.55	0.6
MO2-80-16		251										0.45	0.5
MO2-100-16	1.65	314	1.0	±1600	5.5	100	500	10	500	4000	1	0.3	0.4
MO2-125-16		393										0.25	0.3
MO2-160-16		503										0.22	0.25
MO2-200-16		628										0.19	0.21
MO2-250-16		785										0.15	0.169

Note –module characteristics values of type MO2A are identical to the characteristic values of the corresponding modules MO2

MAXIMUM ALLOWABLE OPERATING MODES

Product name	Repetitive pulse reverse voltage/off-state, U_{RRM} / U_{DRM}, V	Average on-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			Off-state input voltage, U_{Goff}, V		On state surge current*, I_{TSM}, A		Switching voltage, U_{sw}, 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	
			min	max	min	max	max	min	max	max	t, ms	min	max			min	max
MO2-25-16		25								200							
MO2-40-16		40								560							
MO2-63-16		63								720							
MO2-80-16		80								960							
MO2-100-16	±1600	100	10	25	100	100	10	- 3.5	0.8	1350	10	50**	1150	1000	150	-40	+125
MO2-125-16		125								2500							
MO2-160-16		160								4000							
MO2-200-16		200								5000							
MO2-250-16		250								6000							

* to thyristor

**10 V – for modules of type MO2A (the value of remaining modes of modules types MO2A are identical with values modes of corresponding modules MO2)

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

Precious metals are not contained