

SINGLE-PHASE OPTOTHYRISTOR BRIDGE MODULE MO20-100-12; MO20-160-12; MO20-200-12; MO20-250-12 MO20A-100-12; MO20A-160-12; MO20A-200-12; MO20A-250-12

TICKET

Single-phase thyristor-diode bridge module with opto decoupling with thyristors control connected to “positive” output is intended for rectifying conversion of AC into pulsating DC voltage)

OVERALL DRAWING AND ELECTRIC CIRCUIT

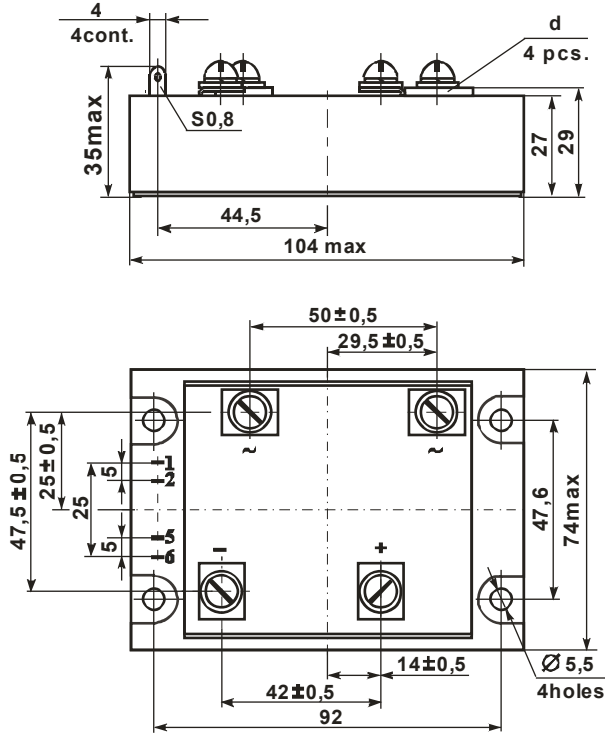


Figure 1

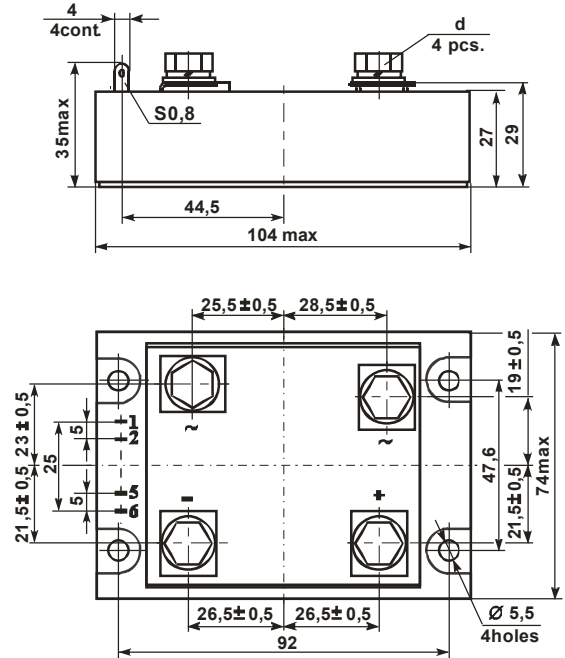
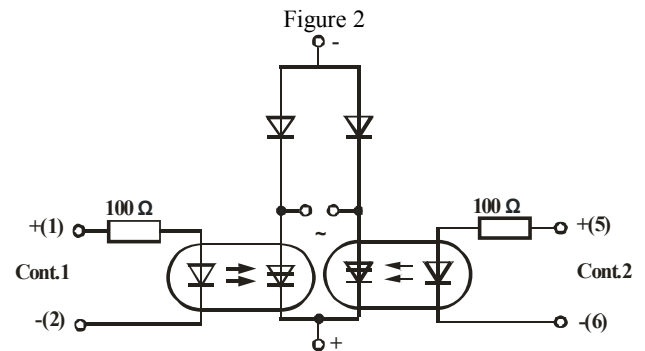


Figure 2

Product description	Figure	d
MO20-100-12, MO20A-100-12	1	screw M5
MO20-160-12, MO20A-160-12	1	screw M6
MO20-160-12, MO20A-200-12	2	pin M8
MO20-160-12, MO20A-250-12	2	pin M8



BASIC CHARACTERISTICS

T = 25 °C

Product name	Peak voltage in thyristor on-state / direct diode peak voltage, U_{TM} / U_{FM} , V		Bridge port current (closed state), I_D , mA		Open state voltage on control input U_{Gon} , V			Electric isolation at DC, U_{ISOL} , V	Isolation resistance between: power outputs and controlling outputs/ power outputs and radiator, R_{ISOL} , MΩ	Thermal resistance transition-housing radiator R_{thic} , °C/W	
	max	I_{OUT} , A	max	U_{OUT} , V	min	max	I_{Gon} , mA			thyristor max	diode max
MO20-100-12	1.65	100	± 1.5	± 1200	3.0	4.2	10	4000	100 / 10	0.50	0.60
MO20-160-12		160								0.35	0.40
MO20-200-12		200								0.20	0.18
MO20-250-12		250								0.15	0.13

Note- Characteristics value of MO20A modules are identical to the characteristics values of corresponding MO20 modules

MAXIMUM ALLOWABLE OPERATING MODES

Product name	Linear voltage (rms), U_{lin} , V		Average rectified module current, I_o , A		Non-repetitive surge DC $I_{F(SM)}$ $I_{T(SM)}$, A		Control current I_G , mA		Critical rate of rise		Junction temperature, T_J^* , °C	
									Of open state current, $(di_T / dt)_{cr}$, A/ μ s	Of closed state voltage, $(du_d / dt)_{cr}$, V/ μ s		
	min	max	min	max	max	t, ms	min	max			min	max
MO20-100-12	50*	840	0.2	100	600	10	10	30	150	1000	-40	+125
MO20-160-12				160	1200							
MO20-200-12				200	1400							
MO20-250-12				250	1600							

**12 V– for modules of type MO20A (the value of other modes of modules MO20A are identical to the mode values of corresponding modules MO20)

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

Precious metals are not contained

5 Naugorskoe highway, Orel, 302020, Russia

Tel. +7(4862) 44-03-44, Fax +7(4862) 47-02-12, E-mail: mail@electrum-av.com