



## SINGLE-PHASE OPTOTHYRISTOR BRIDGE MODULE

MO22-63-12; MO22-100-12; MO22-160-12; MO22A-63-12; MO22A-100-12; MO22A-160-12

## TICKET

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

## OVERALL DRAWING AND ELECTRIC CIRCUIT

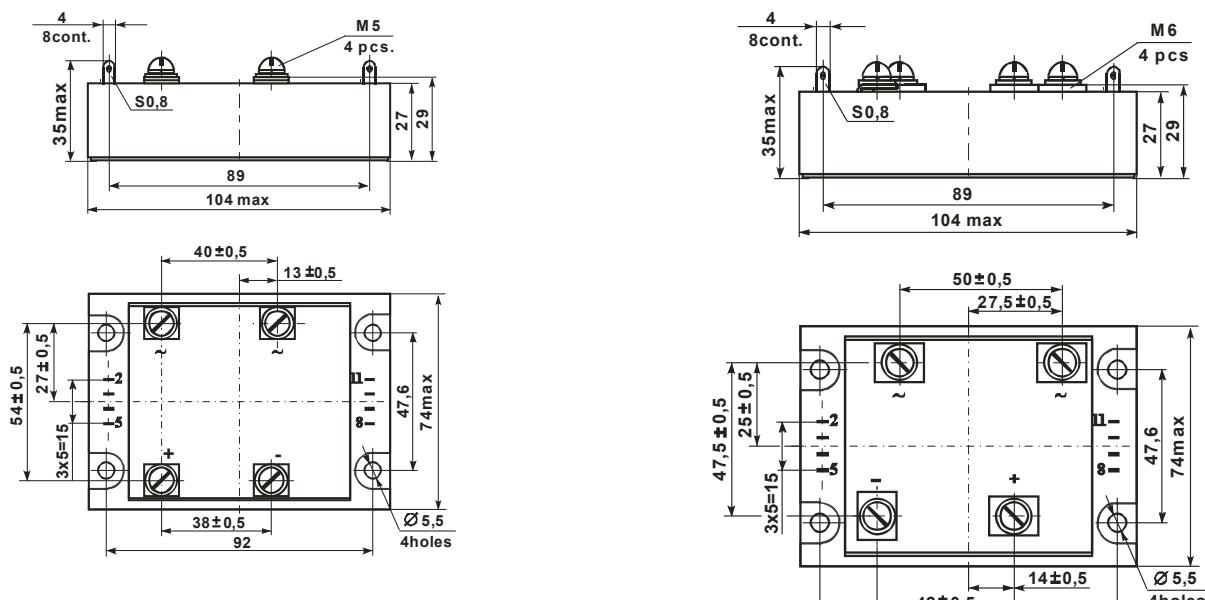
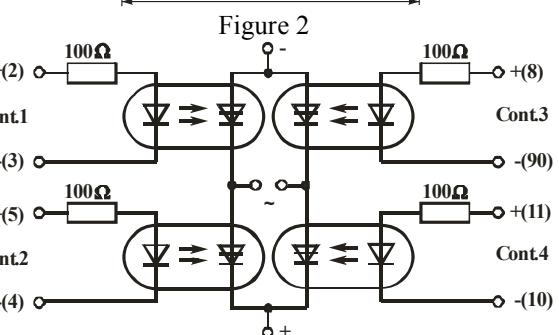


Figure 1

Product description	Figure
MO22-63-12; MO22A-63-12	1
MO22-100-12; MO22A-100-12	1
MO22-160-12; MO22A-160-12	2



## 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
MO22-63-12	63	1.65	± 1.5	3.0	4000	1.0
MO22A-63-12					100 / 10	0.50
MO22-100-12	100					
MO22A-100-12						
MO22-160-12	160					0.35
MO22A-160-12						

### MAXIMUM ALLOWABLE OPERATING MODES

Product name	Linear voltage (rms), Ulin, V		Average rectified module current, Io, A		Non-repetitive surge DC I <sub>F(SM)</sub> I <sub>T(SM)</sub> , A	Control current I <sub>G</sub> , mA	Critical rate of rise		Junction temper- ature, T <sub>VJ</sub> *, °C			
							open state current, (d <sub>IT</sub> / dt) cr,	closed state voltage, (d <sub>UD</sub> / dt)cr, V/μs				
	min	max	min	max	max	t, ms	min	max	A/μs	V/μs	min	max
MO22-63-12	50	840	0.2	63	300	10	10	30	150	1000	-40	+125
MO22A-63-12	12				100							
MO22-100-12	50				160							
MO22A-100-12	12				1200							
MO22-160-12	50											
MO22A-160-12	12											

\*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](mailto:mail@electrum-av.com)**