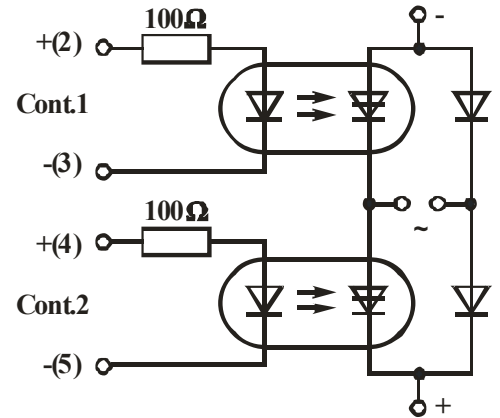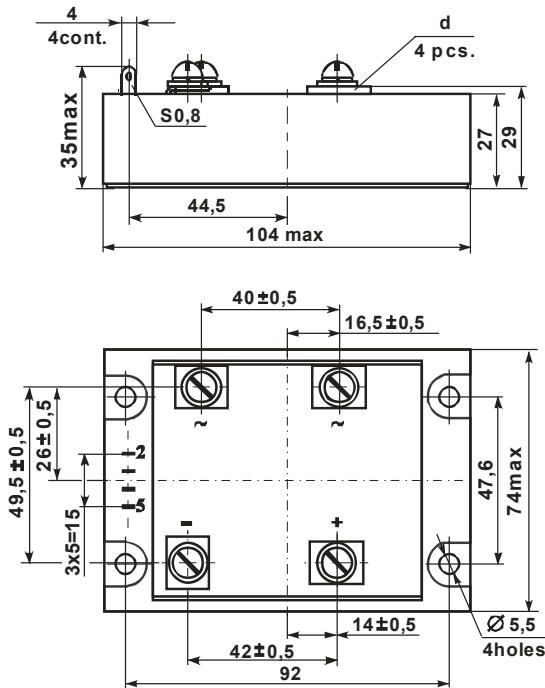# SINGLE-PHASE OPTOTHYRISTOR BRIDGE MODULE
MO21-100-12; MO21-160-12; MO21A-100-12; MO21A-160-12
TICKET

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

Product description	d
MO21-100-12, MO21A-100-12	screw M5
MO21-160-12, MO21A-160-12	screw M6

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	Transition-housing radiator thermal resistance R_{thic}, °C/W	
										thyristor	diode
	max	I_{OUT}, A	max	U_{OUT}, V	min	max	I_{Gon}, mA	max	max	max	max
MO21-100-12 MO21A-100-12	1.65	100	± 1.5	± 1200	3.0	4.2	10	4000	100 / 10	0.50	0.60
MO21-160-12 MO21A-160-12		160								0.35	0.40

MAXIMUM ALLOWABLE OPERATING MODES

Product name	Linear voltage (rms), Ulin, V		Average rectified module current, Io, A		Non-repetitive surge DC $I_{F(SM)}$ $I_{T(SM)}$, A		Control current I_G, mA		Critical rate of rise		Junction temperature, T_{VJ}*, °C	
									open state current, (di_T / dt) cr, A/µs	closed state voltage, (du_d / dt)cr, V/µs		
	min	max	min	max	max	t, ms	min	max			min	max
MO21-100-12	50	840	0.2		100	600	10	10	30	150	1000	-40	+125
MO21A-100-12	12											
MO21-160-12	50				160	1200						
MO21A-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