

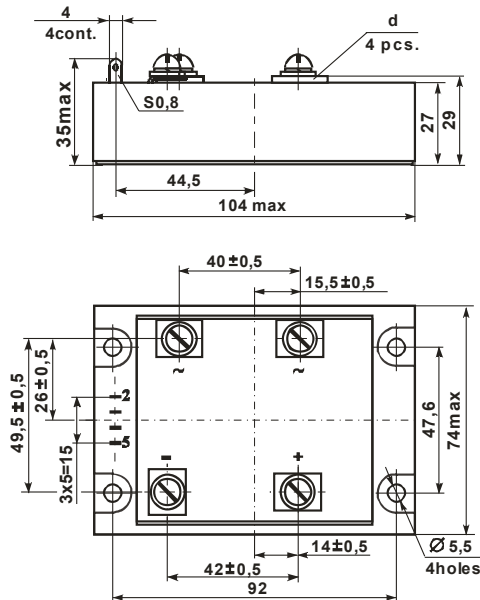
SINGLE-PHASE THYRISTOR-DIODE BRIDGE MODULE

M21-100-12; M21-160-12

DATASHEET IN BRIEF

A single-phase thyristor-diode bridge module with control of two thyristors, connected to "positive" and "negative" outputs, is intended for rectifying (converting of AC into pulsating direct voltage).

OVERALL DRAWING AND ELECTRIC CIRCUIT



Product description	d
M21-100-12	screw M5
M21-160-12	screw M6

BASIC CHARACTERISTICS

T = 25 °C

Product name	Pulse voltage: in thyristor on-state/ diode direct, U_{TM} / U_{FM} , V	Current in thyristor off-state/rectifier reverse current, I_D / I_R , mA		Thyristor hold-on current, I_H , mA	Thyristor turn-on current, I_s , mA	Thyristor gate trigger DC voltage, U_{GT} , V	Thyristor gate trigger DC, I_{GT} , mA	Electric isolation strength at DC between radiator and outputs, U_{ISOL} , V		Thyristor non-trigger DC voltage, U_{GD} , V $T_j = 125$ °C	Thermal junction-radiator resistance $R_{th(j-c)}$, °C/W	
		max	U_D / U_R , V					min	t, minute		thyristor	diode
M21-100-12	1.65	max	max	200	400	3.0	200	4000	1	0.25	0.50	0.60
M21-160-12											0.35	0.40

MAXIMUM ALLOWABLE OPERATING MODES

Product name	Pulse non-repetitive voltage: in thyristor off-state/ diode reverse, U_{DSM} / U_{RSM} , V	Pulse repetitive voltage: in thyristor off-state / diode reverse, U_{DRM} / U_{RRM} , V	Average rectified current, I_O , A $T_r = 75$ °C	Linear voltage (rms), U_{lin} , V	Non-repetitive surge DC, $I_{TSM} I_{FSM}$, A		Maximum switching frequency, f_{com} , kHz	Critical rate of rise of reverse voltage, $(du_R / dt)_{cr}$, V/ μ s	DC critical rate of rise, $(di_T / dt)_{cr}$, A/ μ s	Junction temperature T_{VJ} *, °C	
					max	t, ms				min	max
M21-100-12	± 1300	± 1200	100	840	600	10	3	1000	150	-40	+125
M21-160-12			160		1200						

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

Precious metals are not contained.