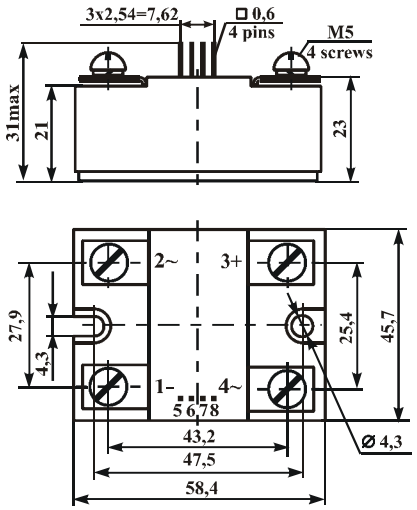
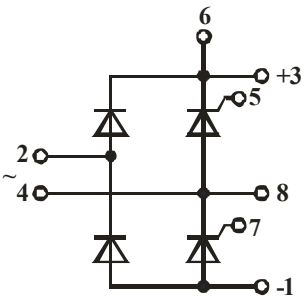
SINGLE-PHASE THYRISTOR-DIODE BRIDGE MODULE
M21-63-12

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





BASIC CHARACTERISTICS

T = 25 °C

Product name	Pulse voltage: in thyristor on-state/ diode direct, U_{TM} / U_{FM}, V max	I_O,A amplit. value	Current in thyristor off-state /rectifier reverse current, I_D / I_R, mA max	U_O, V	Thyristor hold-on current, I_H, mA max	Thyristor turn-on current, I_L, mA max	Thyristor gate trigger DC voltage, U_{GT}, V max	Thyristor gate trigger DC, I_{GT}, mA max	Electric isolation strength at DC between radiator and outputs, U_{ISOL}, V min	t, minute	Thyristor non-trigger DC voltage, U_{GD}, V, T_j = 125 °C max	Thermal junction-radiator resistance Rth(j-c), °C/W: thyristor max	diode max
M21-63-12	1.65	$\frac{\pi}{2} \bullet I_O$ 10 ms, 50 Hz, sinus	1.5	± 1200	200	400	3.0	200	4000	1	0.25	1.0	1.3

MAXIMUM ALLOWABLE OPERATING MODES

Product name	Pulse non-repetitive voltage: in thyristor off-state/ diode reverse, U_{DSM} / U_{RSM}, V max	Pulse repetitive voltage: in thyristor off-state / diode reverse, U_{DRM} / U_{RRM}, V max	Average rectified current, I_O, A, Tr=75 °C max	Linear voltage (rms), Ulin, V max	Non-repetitive surge DC, I_{TSM} I_{FSM}, A max	t, ms	Maximum switching frequency, f_{com}, kHz	Critical rate of rise of reverse voltage, $(du_R / dt)cr$, V/µs max	DC critical rate of rise, $(di_T / dt)cr$, A/µs max	Junction temperature T_{VJ} *, °C min	max
M21-63 - 12	± 1300	± 1200	63	840	300	10	3	1000	150	- 40	+125
* 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.

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