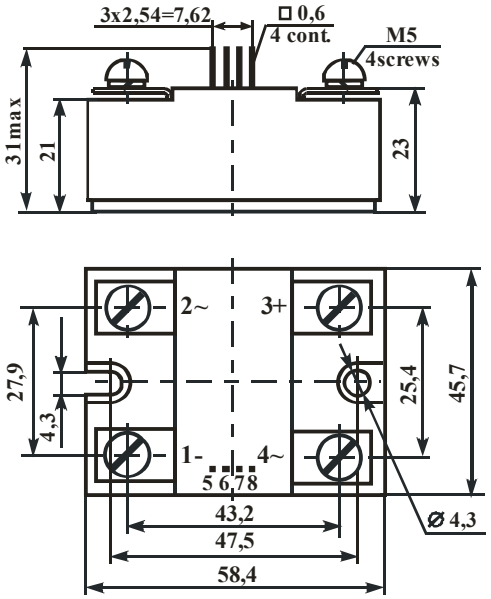
SINGLE-PHASE THYRISTOR-DIODE BRIDGE MODULE

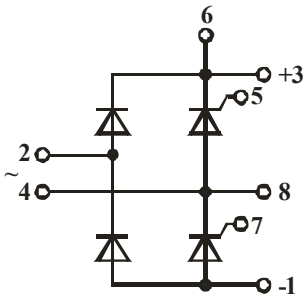
M21-63-16

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 CHARACTERISTCS

Ta = 25 °C

Product name	Pulse voltage: on-state/ direct diode, U_{TM} / U_{FM},		Off-state current /valve DC, I_D / I_R, mA		Thyristor hold-on current, I_H, mA	Thyristor turn-on current, I_I, 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,		Thyristor non-trigger DC voltage, U_{GD}, V T_J = 125 °C	Thermal junction-radiator resistance Rth(j-c), °C/W	
	V	I_O, A amplit. value		U_D/U_R, V					U_{ISOL}, V	t, minute		thyristor	diode
	max		max		max	max	max	max	min		max	max	max
M21-63-12	1.65	$\frac{\pi}{2} \bullet I_O$, 10 ms, 50 Hz, sinus	1.5	± 1600	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	Pulse repetitive voltage: in thyristor off-state / diode reverse, U_{DRM} / U_{RRM}, V	Average rectified current, I_O, A Tr=75 °C	Linear voltage (rms), Ulin, 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/µs	DC critical rate of rise, (di_T / dt)cr, A/µs	Junction temperature T_{VJ} *, °C	
						t, ms					
	max	max	max	max	max			max	max	min	max
M21-63-12	± 1600	± 1600	63	1150	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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