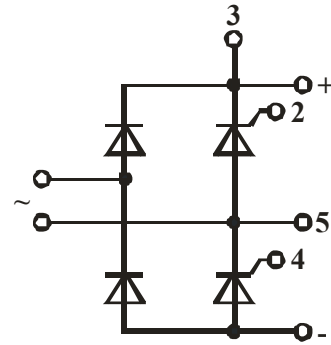
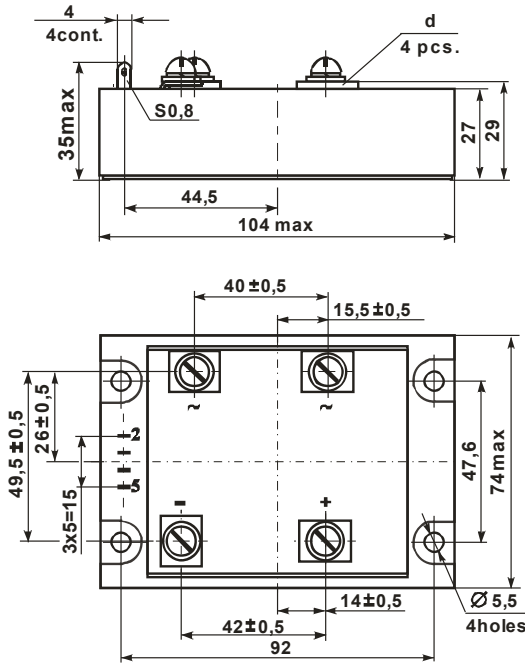


SINGLE-PHASE THYRISTOR-DIODE BRIDGE MODULE
M21-100-16; M21-160-16
DATASHEET IN BRIEF

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
M21-100-16	screw M5
M21-160-16	screw M6

BASIC CHARACTERISTICS

T = 25 °C

Product name	Pulse voltage: in thyristor on-state/diode direct, U_{TM} / U_{FM}		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_T , 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	
	V	I_O , A ampl. value	max	U_D / U_R , V	max	max	max	max	min	t, minute		max	thyristor
M21-100-16	1.65	$\frac{\pi}{2} \cdot I_O$, 10 ms, 50 Hz, sinus	1.5	± 1600	200	400	3.0	200	4000	1	0.25	0.50	0.60
M21-160-16												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/μs	DC critical rate of rise, $(di_T / dt)_{cr}$, A/μs	Junction temperature T_{VJ} *, °C	
					max	t, ms				max	max
M20-100-16			100		600		3	1000	150	- 40	+125
M20-160-16	± 1600	± 1600	160	1150	1200	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.