

SINGLE-PHASE DIODE BRIDGE MODULE
M5Sch -40-1,25; M5Sch -80-1,25; M5Sch -120-1,25; M5Sch -160-1,25; M5Sch -200-1,25
DATASHEET IN BRIEF

The single-phase diode bridge module based on Schottky diodes is intended for rectifying (conversion of alternating voltage into pulsating direct voltage).

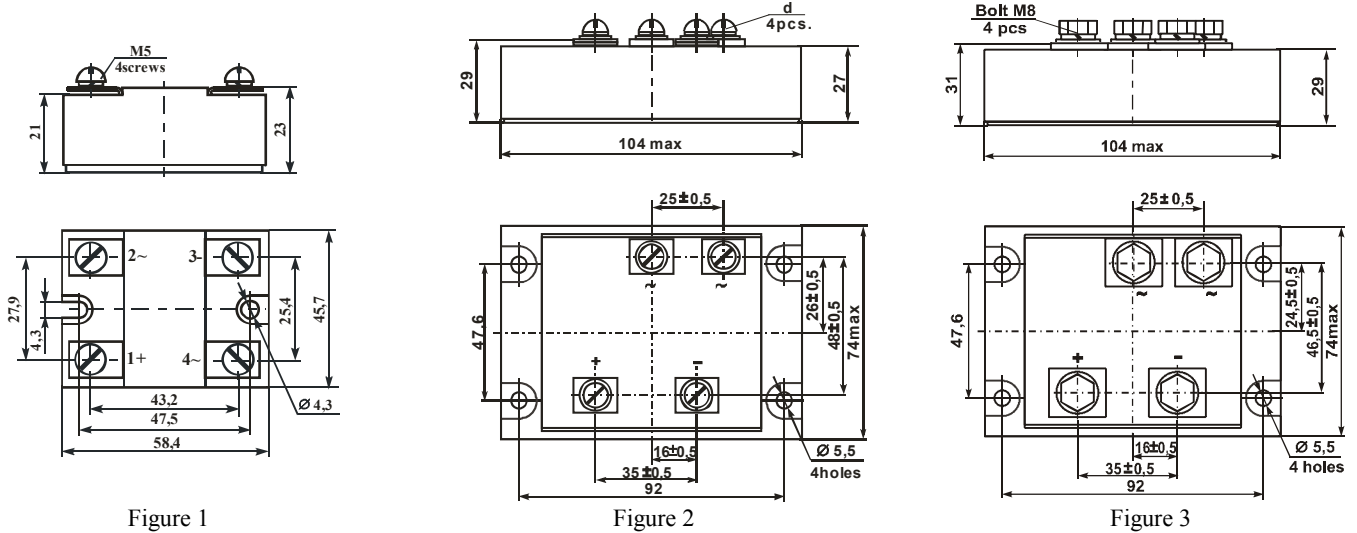
OVERALL DRAWINGS AND MODULE CIRCUIT


Figure 1

Figure 2

Figure 3

| Symbol | Figure | d |
|---------------|--------|----------|
| M5Sch-40-0,6 | 1 | - |
| M5Sch-80-0,6 | 1 | - |
| M5Sch-120-0,6 | 2 | Screw M5 |
| M5Sch-160-0,6 | 2 | Screw M6 |
| M5Sch-200-0,6 | 3 | Bolt M8 |
| M5Sch-300-0,6 | 3 | Bolt M8 |

BASIC CHARACTERISTIC
 $T_{amb} = 25\text{ }^{\circ}\text{C}$

| Product name | Reverse gate current I_R , mA | | Pulse direct diode voltage, U_{FM} , V | | Reverse diode recovery time, t_{rr} , ns | | Electric DC isolation strength between radiator and power outputs, | | Thermal resistance junction-radiator for module $R_{th(j-c)}$, $^{\circ}\text{C/W}$, max |
|----------------|------------------------------------|--------------|---|-----------|---|-----------|--|--------------|--|
| | max | U_{RM} , V | max | I_o , A | max | I_o , A | U_{ISOL} , V min | t , minute | |
| M5Sch-40-1,25 | 3.0 | 125 | 0.85 | 126 | 100 | 40 | 4000 | 1 | 0.80 |
| M5Sch-80-1,25 | | | | 251 | | 80 | | | 0.50 |
| M5Sch-120-1,25 | | | | 377 | | 120 | | | 0.30 |
| M5Sch-160-1,25 | | | | 503 | | 160 | | | 0.25 |
| M5Sch-200-1,25 | | | | 628 | | 200 | | | 0.15 |
| M5Sch-300-1,25 | 5.0 | | | 950 | 300 | | | 0.10 | |

MAXIMUM PERMISSIBLE OPERATING MODES

| Product name | Pulse reverse diode voltage | | Average rectified current, I_o , A | Non-repetitive surge DC, $I_{F(SM)}$, A | | Junction temperature T_{vj}^* , | |
|----------------|----------------------------------|-----------------------------|---|---|-----|-----------------------------------|------|
| | non-repetitive, U_{RSM} , V | repetitive U_{RRM} , V | | T_a , $^{\circ}\text{C}$ | min | max | |
| | max | max | max | | | | max |
| M5Sch-40-1,25 | 125 | 125 | 40 | 300 | 125 | - 40 | +125 |
| M5Sch-80-1,25 | | | 80 | 600 | | | |
| M5Sch-120-1,25 | | | 120 | 900 | | | |
| M5Sch-160-1,25 | | | 160 | 1200 | | | |
| M5Sch-200-1,25 | | | 200 | 1400 | | | |
| M5Sch-300-1,25 | | | 300 | 2100 | | | |

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

Precious metals are not contained