

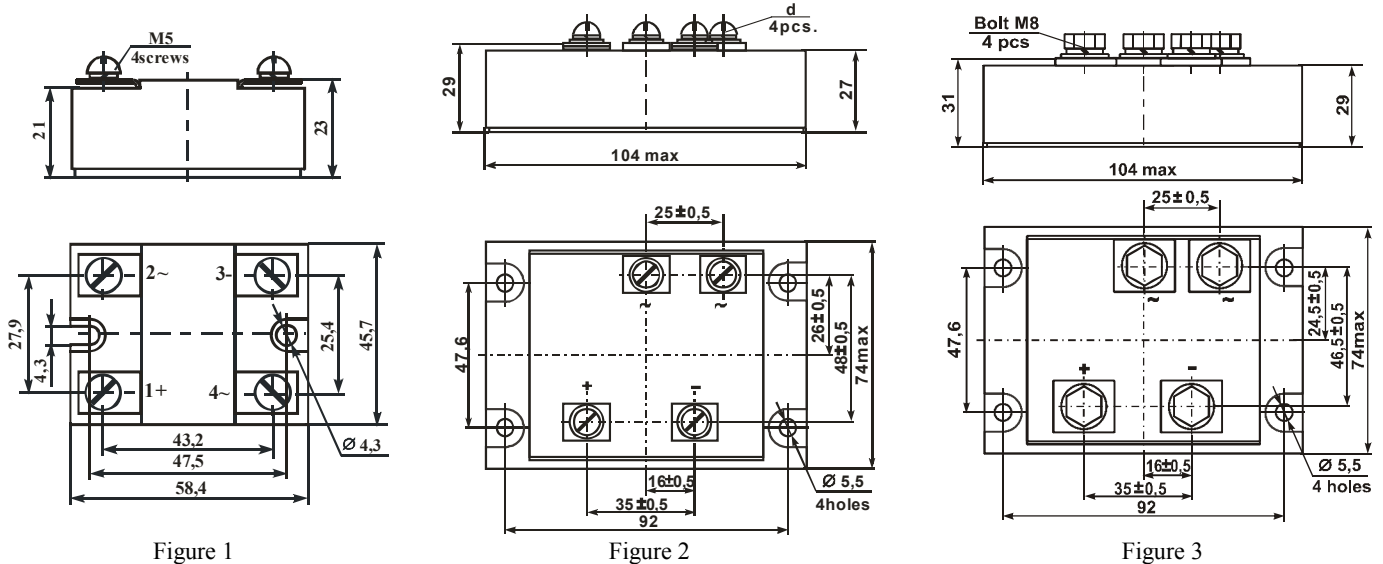
SINGLE-PHASE DIODE BRIDGE MODULE

M5FRD-50-12; M5FRD-100-12; M5FRD-150-12; M5FRD-200-12

DATASHEET IN BRIEF

The single-phase diode bridge module on the basis of fast-recovery diodes is intended for rectifying (conversion of alternating voltage into pulsating direct voltage).

OVERALL DRAWINGS AND MODULE CIRCUIT



Symbol	Figure	d
M5FRD-50-12	1	-
M5FRD-100-12	2	Screw M5
M5FRD-150-12	2	Screw M6
M5FRD-200-12	3	-

BASIC CHARACTERISTIC

T = 25 °C

Product name	Pulse direct diode voltage, U_{FM} , V		Reverse valve current, I_{RRM} , mA		Electric DC isolation strength between radiator and power outputs, U_{ISOL} , V		Reverse recovery time, t_{rr} , ns	Thermal resistance junction-radiator $R_{th(j-c)}$, °C/W	
	max	I_o , A	max	U_{RRM} , V	min	t_r , minute		max	max
M5FRD-50-12	4.1	50	1.5	1200	4000	1	200	0.55	
M5FRD-100-12		100						0.30	
M5FRD-150-12		150						0.22	
M5FRD-200-12		200						0.19	

MAXIMUM PERMISSIBLE OPERATING MODES

Product name	Pulse reverse diode voltage		Average rectified current, I_o , A	Line voltage (rms), U_{lin} , V	Non-repetitive surge DC, I_{FSM} , A	Maximum commutation frequency, f_{com} , kHz	Junction temperature, T_{VJ}^* , °C	
	non-repetitive, U_{RSM} , V	repetitive U_{RRM} , V					min	max
	max	max					max	max
M5FRD-50-12	1300	1200	50	840	500	100	- 40	+125
M5FRD-100-12			100		1000			
M5FRD-150-12			150		1500			
M5FRD-200-12			200		2000			

* 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