

THREE-PHASE DIODE BRIDGE MODULE

M6FRD-50-12; M6FRD-100-12; M6FRD-150-12; M6FRD-200-12

DATASHEET IN BRIEF

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

OVERALL DRAWINGS AND MODULE CIRCUIT

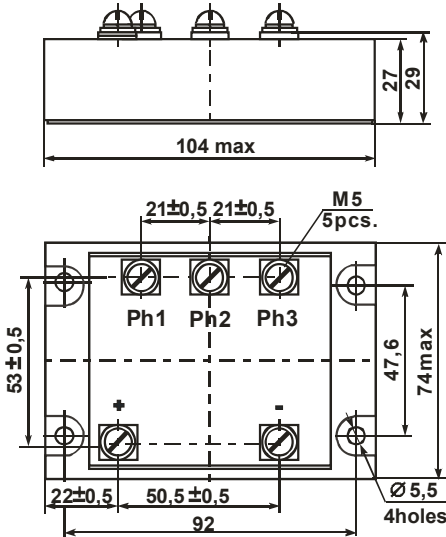


Figure 1

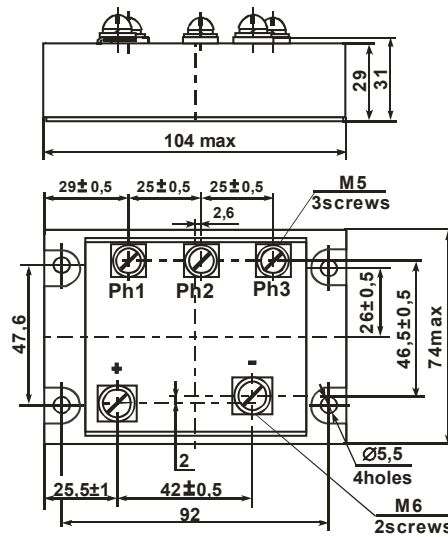


Figure 2

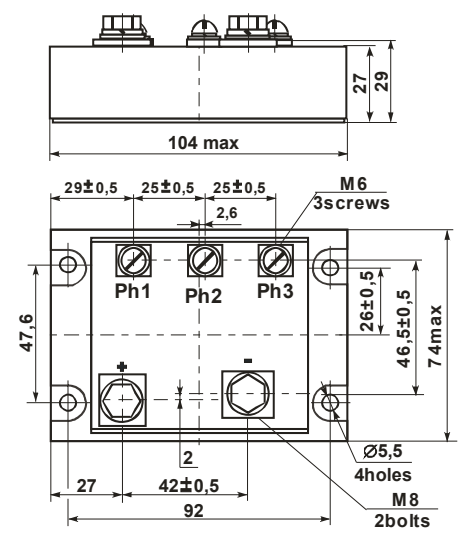
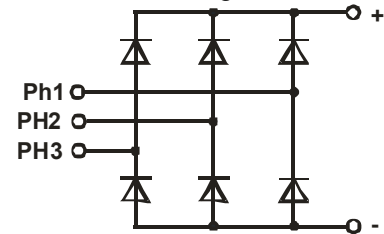


Figure 3

Symbol	Figure
M6FRD-50-12	1
M6FRD-100-12	1
M6FRD-150-12	2
M6FRD-200-12	3



BASIC CHARACTERISTICS

T = 25 °C

PARAMETER	50 A				100 A				150 A				200 A																															
	I _O , A		50		100		150		200		I _{RRM} , mA		max		1.8		1.5		U _{RRM} , V		1200		U _{ISOL} , V		min		4000		t, minute		1		R _{th(j-c)} , °C/W		max		0.55		0.3		0.22		0.19	
Pulse DC diode voltage, U _{FM} , V	I _O , A		50		100		150		200		I _{RRM} , mA		max		1.8		1.5		U _{RRM} , V		1200		U _{ISOL} , V		min		4000		t, minute		1		R _{th(j-c)} , °C/W		max		0.55		0.3		0.22		0.19	

MAXIMUM PERMISSIBLE OPERATING MODES

PARAMETER	50 A	100 A	150 A	200 A						
Pulse non-repetitive reverse diode voltage, U _{RSM} , V	max				1300					
Pulse repetitive reverse diode voltage, U _{RSM} , V	max				1200					
Average rectifier current, I _O , A	max		50		100		150		200	
Linear voltage (rms.), U _{lin} , V	max				840					
Non-repetitive surge DC, I _{FSM} , A	max		500		1000		1500		2000	
Maximum commutation frequency, f _{com} , kHz	Ta, °C				125					
Junction temperature, T _{VJ} *, °C	min				- 40					
	max				+ 125					

* module is designed for operating in the equipment using coolers that support junction temperature in the prescribed ranges

CONTENT OF NON-FERROUS AND PRECIOUS METALS

The module contains the non-ferrous metals: Copper..... g
Brass..... g

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