DIODE-DIODE MODULE
OF FAST-RECOVERY DIODES
M4FRD, M4FRDA
50, 100, 150, 200, 250, 300 A 12 class
DATASHEET IN BRIEF

The diode-diode module on the basis fast-recovery diodes is intended for converting of AC into pulsating DC (as a part of single- and three-phase diode bridges).

OVERALL DRAWINGS

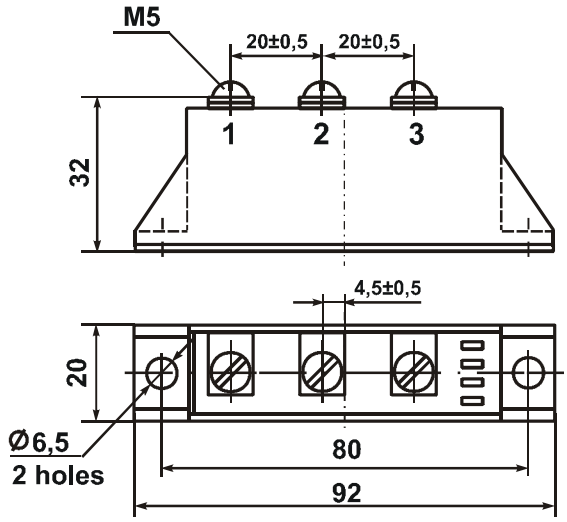


Figure 1 – Drawing of housing E1

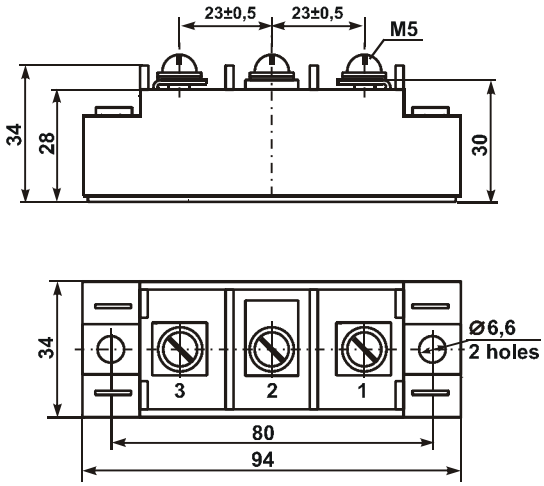


Figure 2 – Drawing of housing E2

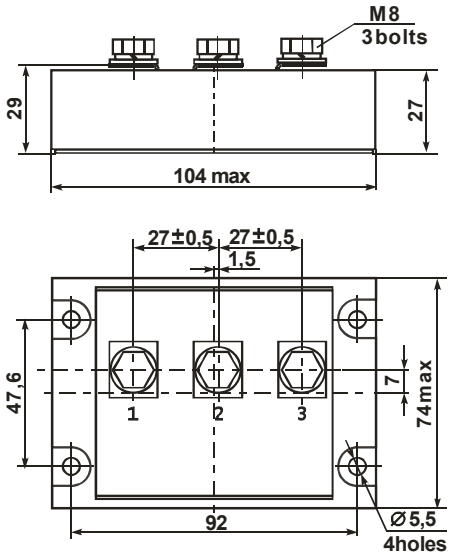


Figure 3 – Drawing of housing DM

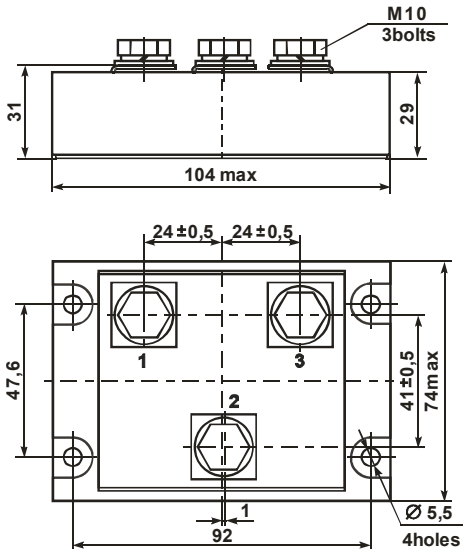


Figure 4 – Drawing of housing DM

TABLE OF OVERALL DRAWINGS

Module		Figure
M4FRD-50-12	M4FRDA-50-12	1 or 2
M4FRD-100-12	M4FRDA-100-12	2
M4FRD-150-12	M4FRDA-150-12	2
M4FRD-200-12	M4FRDA-200-12	3
M4FRD-250-12	M4FRDA-250-12	3
M4FRD-300-12	M4FRDA-300-12	4

INTERNAL CONNECTION SCHEME

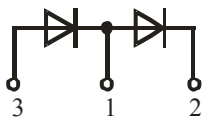


Figure 5 – Connection circuit M4.FRD

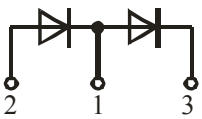


Figure 6 – Connection circuit M4.FRDA

BASIC CHARACTERISTICS

T окр = 25 °C

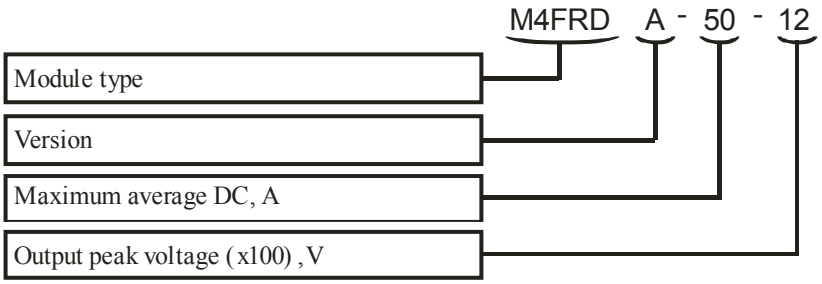
Product name	Pulse direct voltage, U_{FM}, V		Repetitive pulse reverse current, I_{RRM}, mA		Electric DC isolation strength between radiator and power outputs, U_{ISOL},		Reverse recovery time, trr, ns	Thermal resistance junction-cooler Rth(j-c), ^{0}C/W
		I_O, A		U_{OUT}, V	V	t, minute		
	max		max		min		max	max
M4FRD(A)-50-12	4.1	50	1.0	1200	4000	1	200	0.55
M4FRD(A)-100-12		100						0.30
M4FRD(A)-150-12		150						0.22
M4FRD(A)-200-12		200						0.19
M4FRD(A)-250-12		250						0.15
M4FRD(A)-300-12		300						0.11

MAXIMUM PERMISSIBLE OPERATING MODES

Product name	Non-repetitive pulse reverse voltage U_{RSM}, V	Repetitive pulse reverse diode voltage U_{RRM}, V	Average diode DC, $I_{F(AV)}$, A	Surge diode DC, $I_{F(SM)}$, A,		Critical rate of on-state current rise, (di_F / dt) cr, A/µs	Junction temperature T_{VJ}*, °C	
					t, ms			
	max	max	max	max		max	min	max
M4FRD(A)-50-12	1200	1200	50	500	10	150	- 40	+125
M4FRD(A)-100-12			100	1000				
M4FRD(A)-150-12			150	1500				
M4FRD(A)-200-12			200	2000				
M4FRD(A)-250-12			250	2500				
M4FRD(A)-300-12			300	4000				
* Modules are designed for operating in the equipment using coolers that support junction temperature in the prescribed ranges								

Precious metals are not contained.

MODULE SYMBOL



Note – Ordering the module you should specify the housing type (E2, DM)

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