

DIODE-DIODE MODULES
OF FAST-RECOVERY DIODES
M4.2FRD, M4.2FRDA
50, 100, 150, 200, 250, 300 A 12 class
DATASHEET IN BRIEF

Two fast-recovery diodes module with ground cathode is intended for using composed of high-powered converters.

OVERALL DRAWINGS

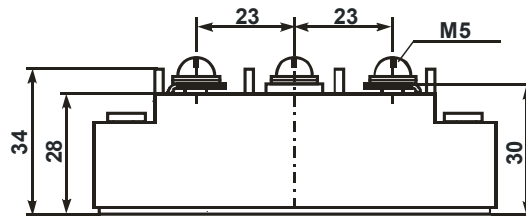


Figure 1 – Drawing of housing E2

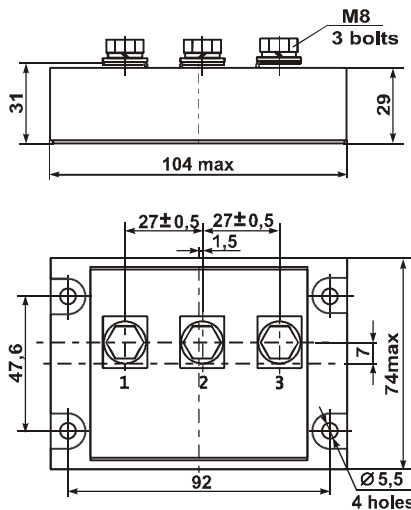


Figure 2 – Drawing of housing DM

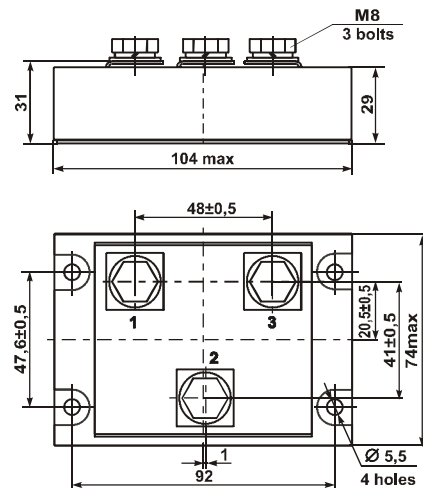


Figure 3 – Drawing of housing DM

TABLE OF OVERALL DRAWINGS

Symbol		Figure
M4.2FRD-50-12	M4.2FRDA-50-12	1
M4.2FRD-100-12	M4.2FRDA-100-12	1
M4.2FRD-150-12	M4.2FRDA-150-12	1
M4.2FRD-200-12	M4.2FRDA-200-12	2
M4.2FRD-250-12	M4.2FRDA-250-12	2
M4.2FRD-300-12	M4.FRDA-300-12	3

INTERNAL CONNECTION SCHEME

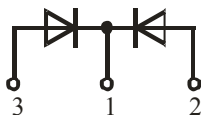


Figure 4 – Connection scheme of M4.2 FRD

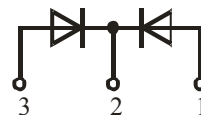


Figure 5 – Connection scheme of M4.2FRDA

BASIC CHARACTERISTIC

T = 25 °C

Product name	Pulse DC voltage, U_{FM} , V		Repeated pulse reverse 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-cooler $R_{th(j-c)}$, °C/W
	max	I_o , A	max	U_{OUT} , V	min	t, minute		
M4.2FRD(A)-50-12	2.1	50	1.0	1200	4000	1	200	0.55
M4.2FRD(A)-100-12		100						0.30
M4.2FRD(A)-150-12		150						0.22
M4.2FRD(A)-200-12		200						0.19
M4.2FRD(A)-250-12		250						0.15
M4.2FRD(A)-300-12		300						0.11

MAXIMUM PERMISSIBLE OPERATING MODES

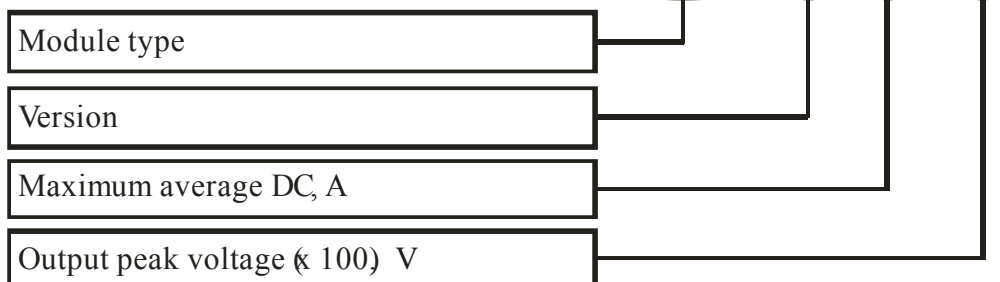
Product name	Non-repeated pulse reverse voltage U_{RSM} , V	Repeated pulse reverse diode voltage, U_{RRM} , V	Average diode DC $I_{F(AV)}$, A	Surge diode DC $I_{F(SM)}$, A		Critical rate of on-state current rise, $(di_F / dt)_{cr}$, A/μs	Junction-temperature T_{VJ}^* , °C	
				t, ms	max		min	max
M4.2FRD(A)-50-12	1200	1200	50	500	10	150	- 40	+125
M4.2FRD(A)-100-12			100	1000				
M4.2FRD(A)-150-12			150	1500				
M4.2FRD(A)-200-12			200	2000				
M4.2FRD(A)-250-12			250	2500				
M4.2FRD(A)-300-12			300	4000				

* The module is designed for operating in the equipment using a cooler that supports junction temperature in the prescribed ranges

Precious metals are not contained.

MODULE SYMBOL

M4.2FRD A - 50 - 12



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