

## DIODE-DIODE MODULES

### M4.2; M4.2A

## 25A, 40A, 63A, 80A, 100A, 125A, 160A, 200A, 250A; 16 class DATASHEET IN BRIEF

A two-diode module with common cathode is intended for using it as a part of power converters.

### OVERALL DRAWINGS

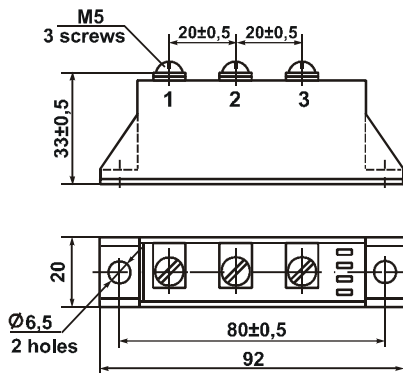


Figure 1 – Overall drawing of package E1

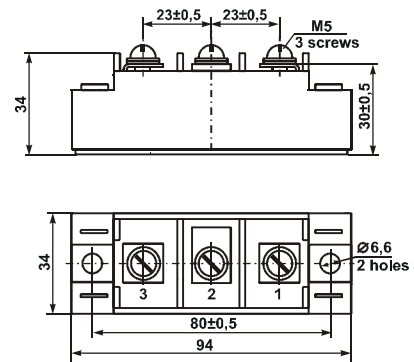


Figure 2– Overall drawing of package E2

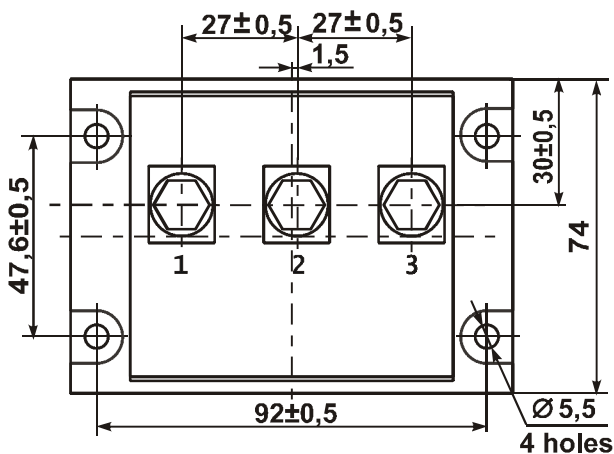
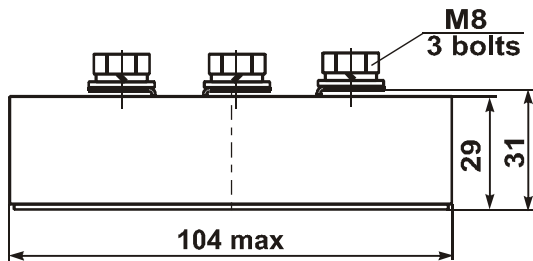


Figure 3 – Overall drawing of package DM

Figure 2– Overall drawing of package E2

### TABLE OF OVERALL DRAWINGS

Module name	Figure	Module name	Figure
M4-25-16	1 or 2	M4A-25-16	1 or 2
M4-40-16	1 or 2	M4A-40-16	1 or 2
M4-63-16	1 or 2	M4A-63-16	1 or 2
M4-80-16	1 or 2	M4A-80-16	1 or 2
M4-100-16	2	M4A-100-16	2
M4-125-16	2	M4A-125-16	2
M4-160-16	2	M4A-160-16	2
M4-200-16	3	M4A-200-16	3
M4-250-16	3	M4A-250-16	3

### INTERNAL CONNECTION CIRCUITS

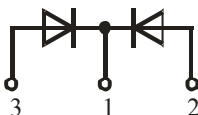


Figure 4 – Modules connection circuit of type M4.2

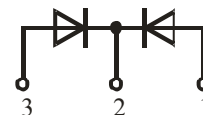


Figure 5 – Modules connection circuit of type M4.2A

## BASIC CHARACTERISTICS

T = 25 °C

Product name	Pulse direct voltage, $U_{FM}$ , V		Repetitive pulse reverse current, $I_{RRM}$ , mA		Electric isolation strength at DC between radiator and power outputs, $U_{ISOL}$ , V		Thermal junction to cooler resistance, $R_{th(j-c)}$ , (°C/W)	
	max	$I_O$ , A amplit. value	max	$U_O$ , V	min	t, minute	max	
M4.2(A)-25-16	1.65	$\pi \cdot I_{F(AV)}$ , 10 ms, 50 Hz, sinus	1.0	1600	4000	1	0.8	
M4.2(A)-40-16							0.7	
M4.2(A)-63-16							0.55	
M4.2(A)-80-16							0.45	
M4.2(A)-100-16							0.3	
M4.2(A)-125-16							0.25	
M4.2(A)-160-16							0.22	
M4.2(A)-200-16							0.19	
M4.2(A)-250-16							0.15	

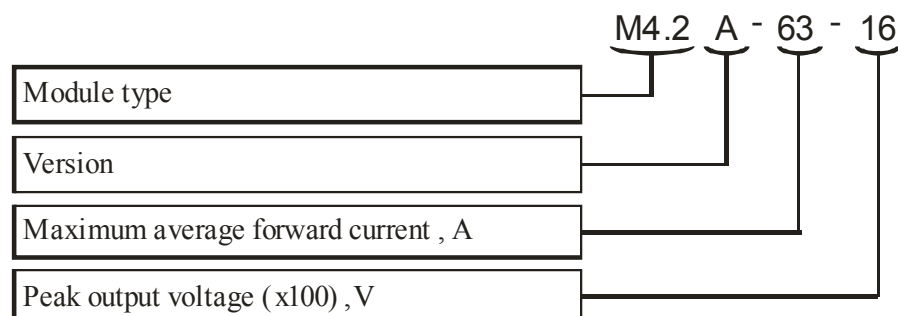
### MAXIMUM ALLOWABLE OPERATING MODES

Product name	Non-repetitive pulse reverse voltage, $U_{RSM}$ , V	Diode repetitive pulse reverse voltage/ in off-state, $U_{RRM}$ , V	Diode average DC, $I_{F(AV)}$ , A	Diode root-mean-square DC, $I_{FRMS}$ , A	Diode surge DC $I_{F(SM)}$ , A		Critical rate of rise of on-state current, $(di_T / dt)_{cr}$ , A/ $\mu$ s	Junction temperature, $T_{VJ}^{**}$ , °C	
					$t$ , ms	max		min	max
M4.2(A)-25-16	1600	1600	25	39	200	10	150	- 40	+125
M4.2(A)-40-16			40	63	560				
M4.2(A)-63-16			63	95	720				
M4.2(A)-80-16			80	125	960				
M4.2(A)-100-16			100	155	1350				
M4.2(A)-125-16			125	188	2500				
M4.2(A)-160-16			160	250	4000				
M4.2(A)-200-16			200	310	5000				
M4.2(A)-250-16			250	390	6000				

\* the modules are designed to operate in equipment with using of coolers that support transition temperature in the prescribed ranges

Precious metals are not contained

### MODULE DESCRIPTION



Note – when ordering the module you must specify the housing type (E1, E2, DM)

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