

DIODE-DIODE MODULE M4Sch, M4SchA 40, 80, 120, 160, 200, 240, 320A 1,25 class DATASHEET IN BRIEF

The diode-diode module based on Schottky diodes are intended for converting of AC into pulsing DC (as a part of single-phase and three-phase diode bridges).

OVERALL DRAWINGS

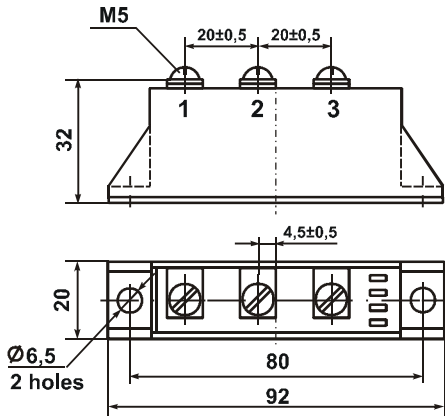


Figure 1 – Drawing of housing E1

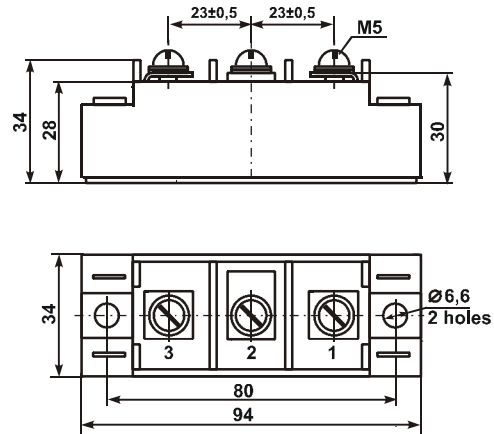


Figure 2 – Drawing of housing E2

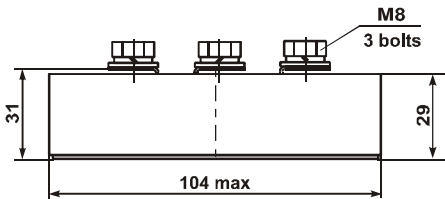


Figure 3 – Drawing of housing DM

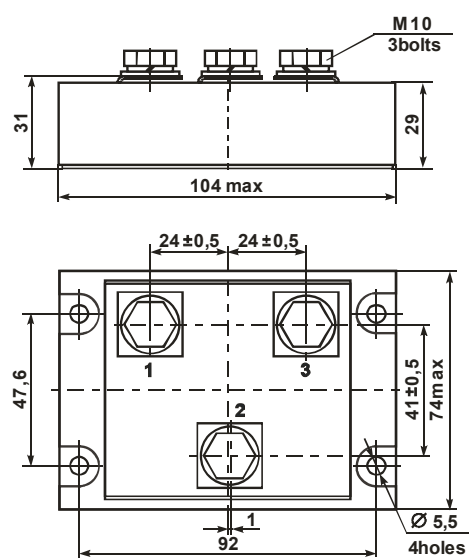


Figure 4 – Drawing of housing DM

TABLE OF OVERALL DRAWINGS

Module	Figure	Module	Figure
M4Sch-40-1,25	1 or 2	M4SchA-40-1,25	2
M4Sch-80-1,25	1 or 2	M4SchA-80-1,25	2
M4Sch-120-1,25	2	M4SchA-120-1,25	2
M4Sch-160-1,25	2	M4SchA-160-1,25	2
M4Sch-200-1,25	3	M4SchA-200-1,25	3
M4Sch-240-1,25	3	M4SchA-240-1,25	3
M4Sch-320-1,25	4	M4SchA-320-1,25	4

INTERNAL CONNECTION SCHEME

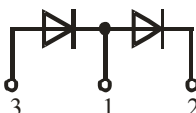


Figure 5 – Connection circuit M4Sch

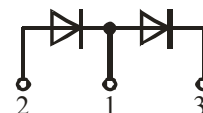


Figure 6 – Connection circuit M4SchA

BASIC CHARACTERISTICS

T = 25 °C

Product name	Pulse direct 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, trr, ns		Thermal resistance junction-cooler $R_{th(j-c)}$, °C/W
	max	I_{OUT} , A	max	U_{OUT} , V	min	t, min	max	$I_{F(AV)}$, A	
M4Sch(A)-40-1,25	1.65	126	1.0	125	4000	1	100	40	0.80
M4Sch(A)-80-1,25		251						80	0.50
M4Sch(A)-120-1,25		377						120	0.30
M4Sch(A)-160-1,25		503						160	0.25
M4Sch(A)-200-1,25		628						200	0.22
M4Sch(A)-240-1,25		754						240	0.16
M4Sch(A)-320-1,25		1005						320	0.12

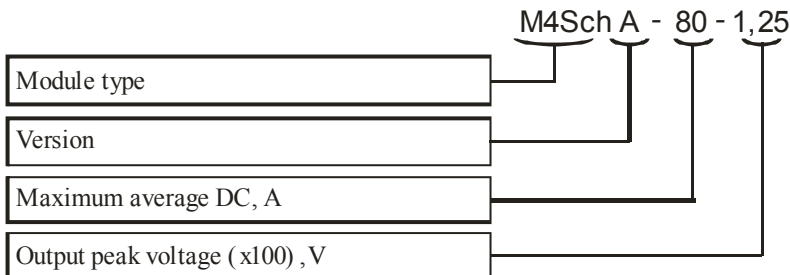
MAXIMUM PERMISSIBLE OPERATING MODES

Product name	Non-repeated pulse reverse voltage U_{RSM} , V	Repetitive pulse reverse diode voltage U_{RRM} , V	Average diode DC $I_{F(AV)}$, A	Root-mean-square diode DC I_{FRMS} , A	Pulse diode DC I_{FM} , A	Q	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	
							max	t, ms		min	min
M4Sch(A)-40-1,25	125	125	40	63	80	2	300	10	160	-40	+125
M4Sch(A)-80-1,25			80	125	160		600				
M4Sch(A)-120-1,25			120	188	240		900				
M4Sch(A)-160-1,25			160	251	320		1200				
M4Sch(A)-200-1,25			200	314	400		1500				
M4Sch(A)-240-1,25			240	377	480		1800				
M4Sch(A)-320-1,25			320	502	640		2100				

* 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 (E1, E2, DM)

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