

Diode modules

Diode circuits perform various tasks in electrical control systems, particularly in electronic ones:

- Electrical decoupling of messages in fault signaling systems
- Spark-suppression diodes for limiting surge voltages of inductive loads, (solenoid valves, DC relays or similar)
- Can be supplied as “diode gates” combined with anode or cathode or as freely assignable diodes



With diode type 1 N 4007

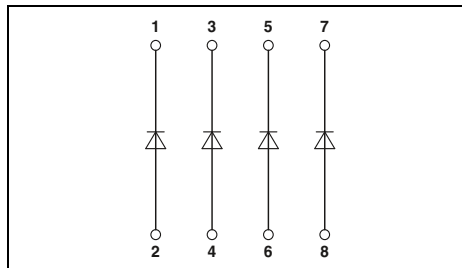


With diode type 1 N 5408

Notes:

Further circuit diagrams can be found in the data sheet at phoenixcontact.net/products.

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Technical data

Diodes	4E / 8E / 17E / 7P / 7M	14P / 14M / 32P / 32M
Max. operating voltage U_{max}	250 V AC	250 V AC
Peak reverse voltage per diode	1300 V	1300 V
Reverse current per diode	5 μ A	5 μ A
Conducting state voltage per diode	approx. 0.8 V	approx. 0.8 V
Conducting state current per diode		
	with single load	0.7 A
	with simultaneous loads	0.5 A

General data	
Ambient temperature range	-20 °C ... 50 °C
Rated insulation voltage	300 V (according to EN 50178)
Pollution degree / Surge voltage category	III, basic insulation (as per EN 50178)
Pollution degree / Surge voltage category	2 (according to EN 50178)
Mounting position	any
Mounting	Can be aligned without spacing
Dimensions H / D	75 / 55 mm
Screw connection solid / stranded / AWG	0.2 ... 4 mm ² / 0.2 ... 2.5 mm ² / 24 - 12
Conformance / approvals	
Conformance	CE-compliant

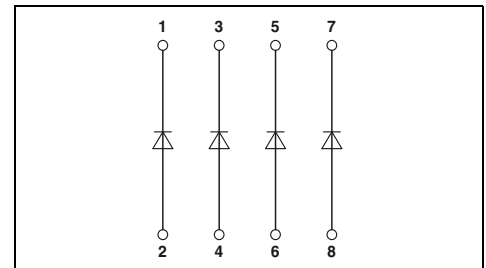
Ordering data

Description	Housing width	Type	Order No.	Pcs. / Pkt.
Diode module , can be individually wired	4 diodes	EMG 22-DIO 4E	2950048	10
	8 diodes	EMG 45-DIO 8E	2950103	5
	17 diodes	EMG 90-DIO 17E	2954895	5
Diode module , with P-polarity (common cathode)	4 diodes	EMG 22-DIO 7P	2950064	10
	7 diodes			
	8 diodes			
	14 diodes			
Diode module , with M polarity (common anode)	32 diodes	EMG 45-DIO14P	2950116	5
		EMG 90-DIO 32P	2954918	5
	4 diodes	EMG 22-DIO 7M	2950077	10
	7 diodes			
	8 diodes			
	14 diodes			
	32 diodes	EMG 45-DIO14M	2950129	5
		EMG 90-DIO 32M	2954934	5

Accessories

Equipment marker	EMG-GKS 12	2947035	50
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Technical data

Diodes	4E-... / 4P-... / 4M-... / 8E-...	8P-... / 8M-...
Max. operating voltage U_{max}	250 V AC	250 V AC
Peak reverse voltage per diode	1000 V	1000 V
Reverse current per diode	10 μ A	10 μ A
Conducting state voltage per diode	approx. 0.8 V	approx. 0.8 V
Conducting state current per diode		
	1.5 A	1.5 A
	1 A	0.3 A

General data	
Ambient temperature range	-20 °C ... 50 °C
Rated insulation voltage	300 V (according to EN 50178)
Pollution degree / Surge voltage category	III, basic insulation (as per EN 50178)
Pollution degree / Surge voltage category	2 (according to EN 50178)
Mounting position	any
Mounting	Can be aligned without spacing
Dimensions H / D	75 / 55 mm
Screw connection solid / stranded / AWG	0.2 ... 4 mm ² / 0.2 ... 2.5 mm ² / 24 - 12
Conformance / approvals	
Conformance	CE-compliant

Ordering data

Type	Order No.	Pcs. / Pkt.
EMG 22-DIO 4E-1N5408	2952790	10
EMG 45-DIO 8E-1N5408	2949389	5
EMG 22-DIO 4P-1N5408	2952198	10
EMG 45-DIO 8P-1N5408	2954879	5
EMG 22-DIO 4M-1N5408	2952211	10
EMG 45-DIO 8M-1N5408	2954882	5

Accessories

Equipment marker	EMG-GKS 12	2947035	50
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