Miniature PCB Relay EJ

- **1pole 3A/5A, 1 form A (NO) contact**
- **Sensitive coil 200mW**
- **Ambient temperature 85°C**
- **RoHS compliant (Directive 2002/95/EC)**
- **Coil UL class F (155) Insulation System**



Typical applications
Home appliances.

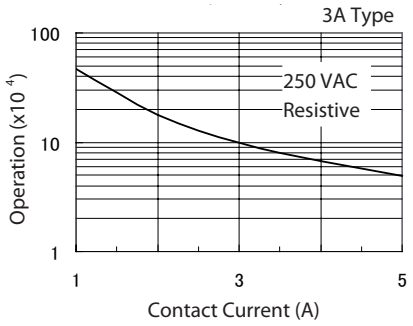
Approvals

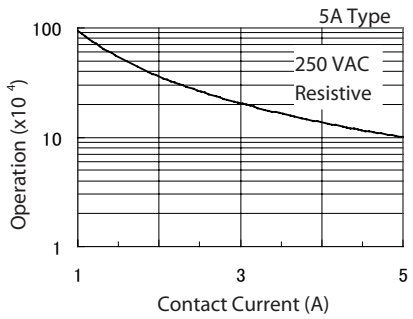
VDE 40026866, UL E58304
Technical data of approved types on request.

Contact Data

Contact arrangement	1 form A (NO)
Rated voltage	250VAC
Max. switching voltage	30VDC, 277VAC
Rated current	3A/5A
Switching power	1,250VA, 150W
Contact material	AgNi
Min. recommended contact load	100mA, 5VDC
Initial contact resistance	100mΩ at 1A, 6VDC
Frequency of operation, with/without load	1800/18000h^{-1}
Operate/release time max.	10ms
Electrical endurance	
EJ00 (3A): 3A, 250VAC, resistive:	100x10^3 ops.
EJ05 (5A): 5A, 250VAC, resistive:	100x10^3 ops

Electrical endurance





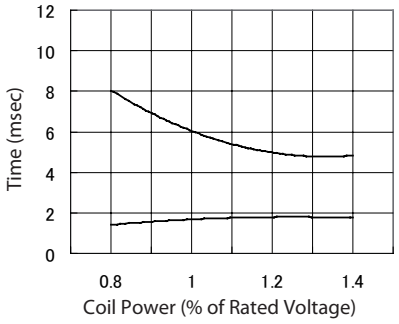
Contact Data (continued)

Contact ratings

Type	Contact	Load	Cycles
IEC 61810			
EJ	form A (NO)	5A,250VAC, cosφ=1, 85°C	100x10^3
EJ	form A (NO)	2A,250VAC, cosφ=1, 85°C	100x10^3
EJ	form A (NO)	3A,250VAC, cosφ=1, 105°C	250x10^3
UL 508			
EJ	form A (NO)	3A,277VAC, cosφ=1, 85°C	50x10^3

Mechanical endurance	>5x10^6 operations

Operate time



Coil Data

Coil voltage range	3 to 24VDC
Coil insulation system according UL	class 155 (F)

Coil versions, DC coil

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10%	Rated coil power mW
003	3	2.25	0.3	45	200
005	5	3.75	0.5	125	200
006	6	4.50	0.6	180	200
009	9	6.75	0.9	405	200
012	12	9.00	1.2	720	200
018	18	13.50	1.8	1620	200
024	24	18.00	2.4	2890	200

All figures are given for coil without pre-energization, at ambient temperature +23°C.

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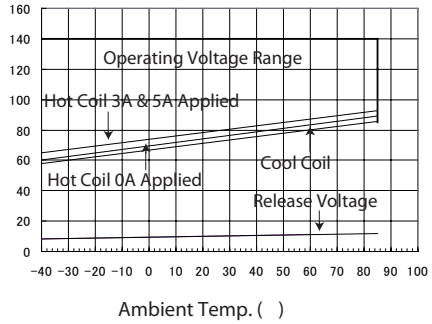
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Miniature PCB Relay EJ (Continued)

Contact data (continued)

Coil operative range



Insulation Data

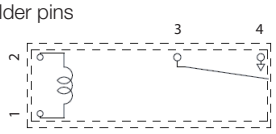
Initial dielectric strength	
between open contacts	750V$_{rms}$
between contact and coil	4000V$_{rms}$
Initial surge withstand voltage	
between contact and coil	10000V
Initial insulation resistance	1000MΩ
Clearance/creepage	
between contact and coil	>= 6.3mm standard type
	>= 8.0mm reinforced type

Other Data

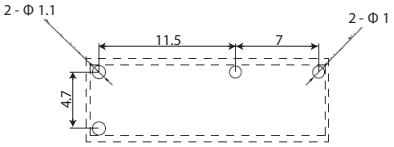
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter	
Ambient temperature	-40 to 85°C
Category of environmental protection	
IEC 61810	RTII - flux proof, RTIII - wash tight
Vibration resistance (functional)	10 to 50Hz, 1.5mm double amplitude
Shock resistance (functional)	
IEC 60068-2-27 (half sine)	98m/s^2, 11ms
Terminal type	PCB-THT
Weight	4g
Resistance to soldering heat THT	
IEC 60068-2-20	260°C/5s
Packaging/unit	box/1000 pcs.

Terminal assignment

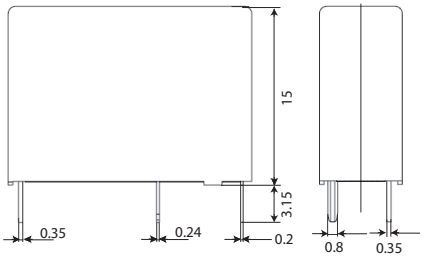
Bottom view on solder pins

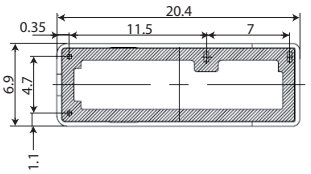


PCB layout



Dimensions





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Miniature PCB Relay EJ (Continued)

Product code structure Typical product code: **EJ 00 -1 A 4 -D 012 -F**

Type
EJ Miniature PCB Relay EJ

Version
00 3A **05** 5A

Poles
1 1 pole

Contact arrangement
A 1 form A (NO) contact

Contact material
4 AgNi

Coil version
D DC standard 200mW

Coil
Coil code: please refer to coil versions table

Sealing
F Flux proof **W** Wash tight*

Electrical feature
Blank Standard
R Reinforced insulation type without WG
W WG Product in accordance with IEC 60335-1 (domestic appliances)*
S Reinforced insulation type with WG

*) Wash tight version and WG version on request.

Product code	Version	Contact	Cont.material	Coil version	Coil voltage	Sealing	Part number
EJ00-1A4-D003-F	3A	1 form A (NO)	AgNi 90/10	200mW	3VDC	Flux proof	1649595-1
EJ00-1A4-D005-F					5VDC		1649595-2
EJ00-1A4-D006-F					6VDC		1649595-3
EJ00-1A4-D009-F					9VDC		1649595-4
EJ00-1A4-D012-F					12VDC		1649595-5
EJ00-1A4-D018-F					18VDC		1649595-6
EJ00-1A4-D024-F					24VDC		1649595-7
EJ05-1A4-D003-F	5A				3VDC		1649594-1
EJ05-1A4-D005-F					5VDC		1649594-2
EJ05-1A4-D006-F					6VDC		1649594-3
EJ05-1A4-D009-F					9VDC		1649594-4
EJ05-1A4-D012-F					12VDC		1649594-5
EJ05-1A4-D018-F					18VDC		1649594-6
EJ05-1A4-D024-F					24VDC		1649594-7

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