

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.



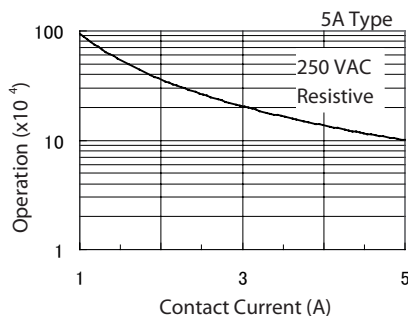
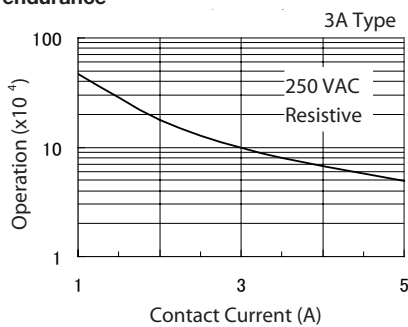
Approvals

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



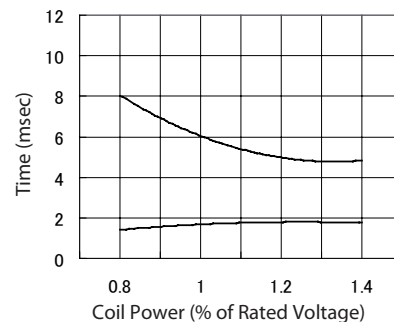
Contact Data (continued)

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 >5x10⁶ operations

Operate time



Coil Data

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

Coil versions, DC coil

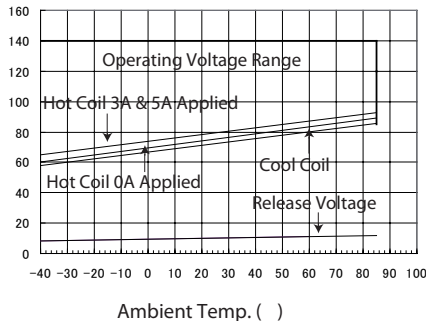
Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10%	Rated coil power mW
003	3	2.25	0.3	45	200
005	5	3.75	0.5	125	200
006	6	4.50	0.6	180	200
009	9	6.75	0.9	405	200
012	12	9.00	1.2	720	200
018	18	13.50	1.8	1620	200
024	24	18.00	2.4	2890	200

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

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/customer-support/rohssupportcenter

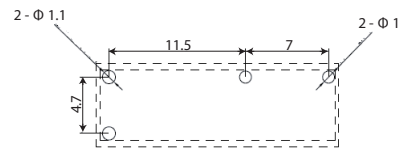
Ambient temperature	-40 to 85°C
Category of environmental protection	
IEC 61810	RTII - flux proof, RTIII - wash tight
Vibration resistance (functional)	10 to 50Hz, 1.5mm double amplitude
Shock resistance (functional)	
IEC 60068-2-27 (half sine)	98m/s ² , 11ms
Terminal type	PCB-THT
Weight	4g
Resistance to soldering heat THT	
IEC 60068-2-20	260°C/5s
Packaging/unit	box/1000 pcs.

Terminal assignment

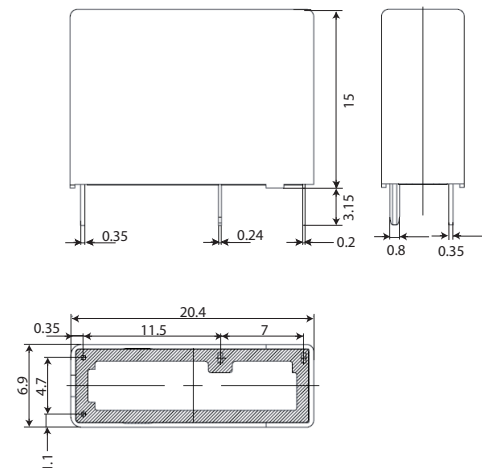
Bottom view on solder pins



PCB layout



Dimensions



Miniature PCB Relay EJ (Continued)

Product code structure		Typical product code											
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				W						WG Product in accordance with IEC 60335-1 (domestic appliances)*	
R		Reinforced insulation type without WG				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