

REED RELAY EDR1,2,3 SERIES


E155181(R)



SIP (PIN OUT:1357)



DIP



SMD



SIP (PIN OUT:1267)



HIGH INSULATION (DIP)



HIGH INSULATION (SMD)

FEATURES

- Miniature, cost-effective switching solution
- Molded construction for compatibility with automatic board processing
- Completely washable
- Dip type construction with the same terminal pitch as ICs or TTLs
- The high sensitivity allows direct driving by TTL, etc.
- Magnetic shield cover is available

SPECIFICATIONS

1.COIL RATING

Contact form	Nominal Voltage(VDC)	Max. Operate Voltage(VDC)	Pull-in Voltage(VDC)	Dropout Voltage(VDC)	※Coil Resistance(Ω)	Nominal input power(mW)
1A	5	16	3.75	0.8	500±10%	50
	12	20	9.00	1.0	1000±10%	144
	24	32	18.00	2.0	2150±10%	268
2A	5	11	3.75	0.8	140±10%	179
	12	20	9.00	1.0	500±10%	288
	24	32	18.00	2.0	2150±10%	268
1B	5	6	4.20	0.6	500±10%	50
	12	14.5	9.00	1.0	1000±10%	144
	24	29	18.00	2.0	2150±10%	268
1C	5	11	3.75	0.8	200±10%	125
	12	20	9.00	1.0	500±10%	288
	24	32	18.00	2.0	2150±10%	268

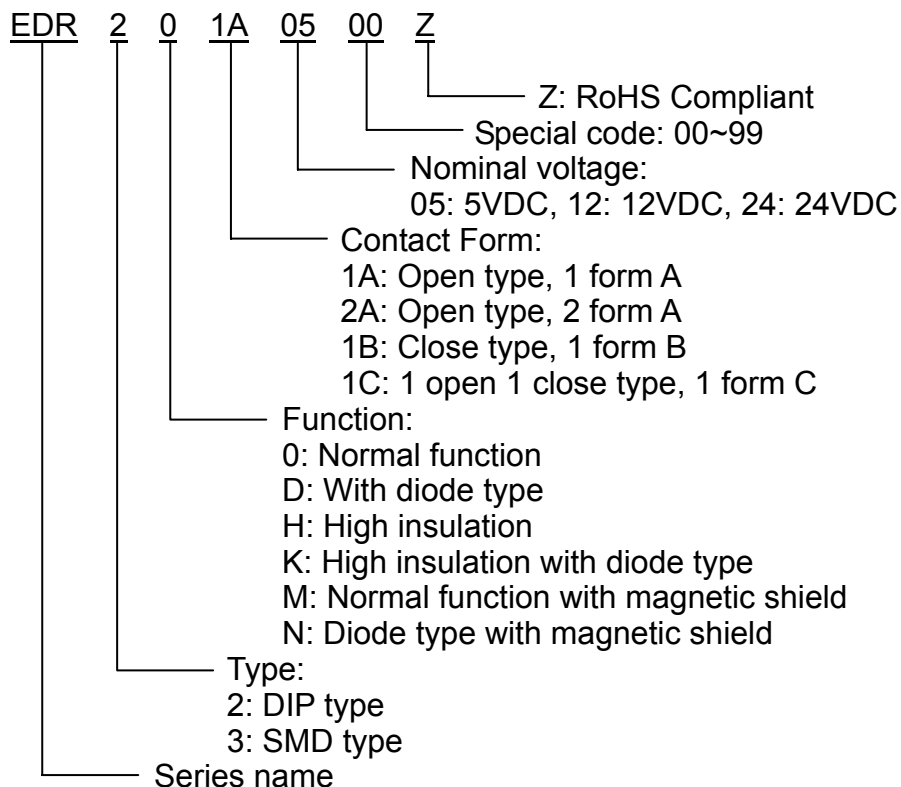
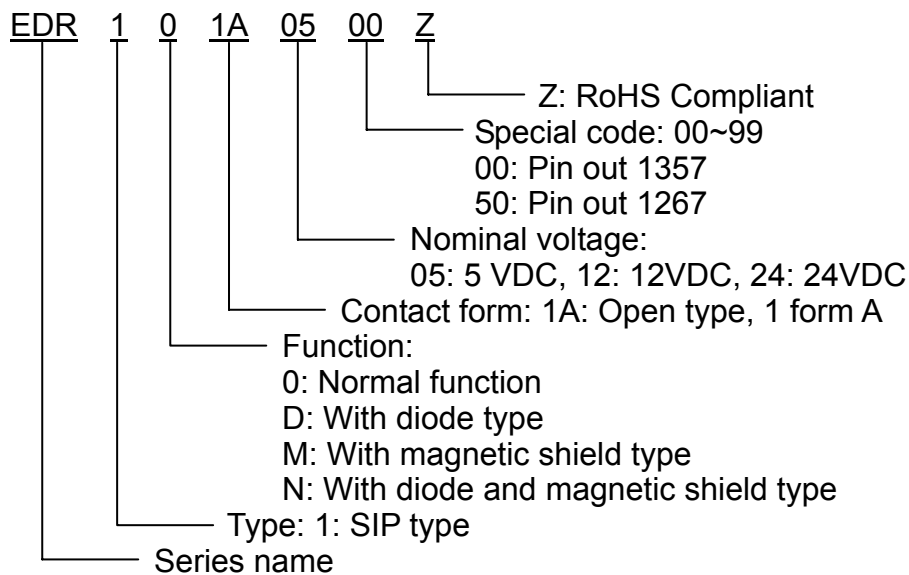
※Special design are available on request.



2.CONTACT RATING

Contact form		1A	2A	1B	1C
Switching current		0.5 ADC Max.	0.5 ADC Max.	0.5 ADC Max.	0.2 ADC Max.
Carry current		1.0 ADC Max.	1.0 ADC Max.	1.0 ADC Max.	0.5 ADC Max.
Switching power		10 VA Max.	10 VA Max.	10 VA Max.	3 VA Max.
Electrical life		1×10^8 (Ref 10VDC,10mA)	1×10^8 (Ref 10VDC,10mA)	1×10^8 (Ref 10VDC,10mA)	5×10^7 (Ref 5VDC,1mA)
Contact resistance		150 mΩ Max.	150 mΩ Max.	150 mΩ Max.	150 mΩ Max.
Operate time		1.0 ms Max. (including bounce time)	1.0 ms Max. (including bounce time)	1.0 ms Max. (including bounce time)	1.5 ms Max. (including bounce time)
Release time		0.5 ms Max.	0.5 ms Max.	0.5 ms Max.	2.0 ms Max.
Maximum voltage		100 VDC Max.	100 VDC Max.	100 VDC Max.	30 VDC Max.
Insulation resistance		$10^{10} \Omega$ Min. (at 100 VDC)	$10^{10} \Omega$ Min. (at 100 VDC)	$10^{10} \Omega$ Min. (at 100 VDC)	$10^9 \Omega$ Min. (at 100 VDC)
Dielectric strength	Coil to contact	1400 VDC Min. (General) 4000 VDC Min. (high insulation)	1400 VDC Min.	1400 VDC Min.	1400 VDC Min.
	Across contacts	250 VDC Min.	250 VDC Min.	250 VDC Min.	150 VDC Min.
Temperature range	Operating temperature	-40°C ~ +85°C	-40°C ~ +85°C	-40°C ~ +85°C	-40°C ~ +85°C
	Storage temperature	-55°C ~ +125°C	-55°C ~ +125°C	-55°C ~ +125°C	-55°C ~ +125°C
Shock resistance		30G Min.	30G Min.	30G Min.	30G Min.

■ PART NUMBER SYSTEM

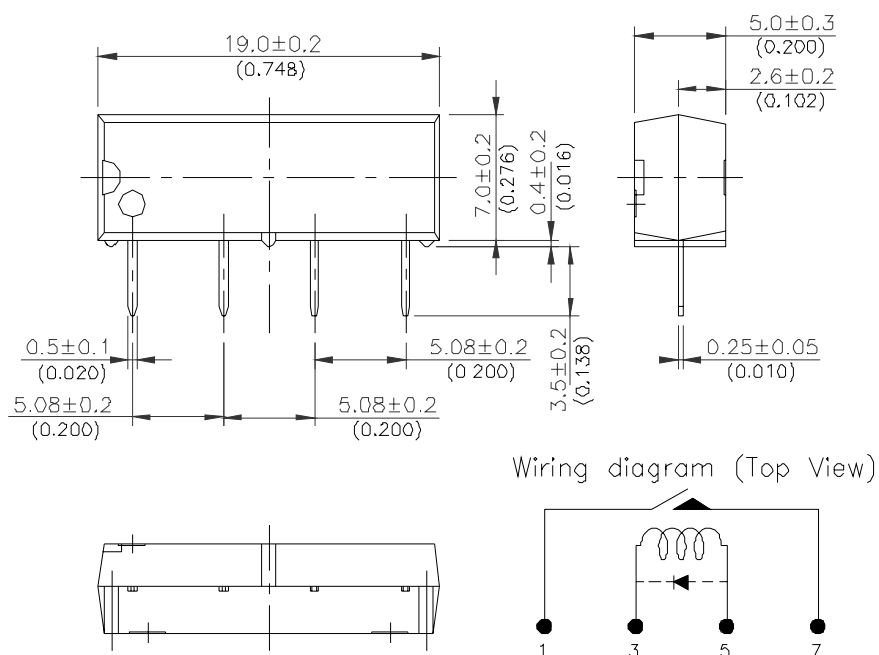


■ DIMENSIONS

SIP TYPE

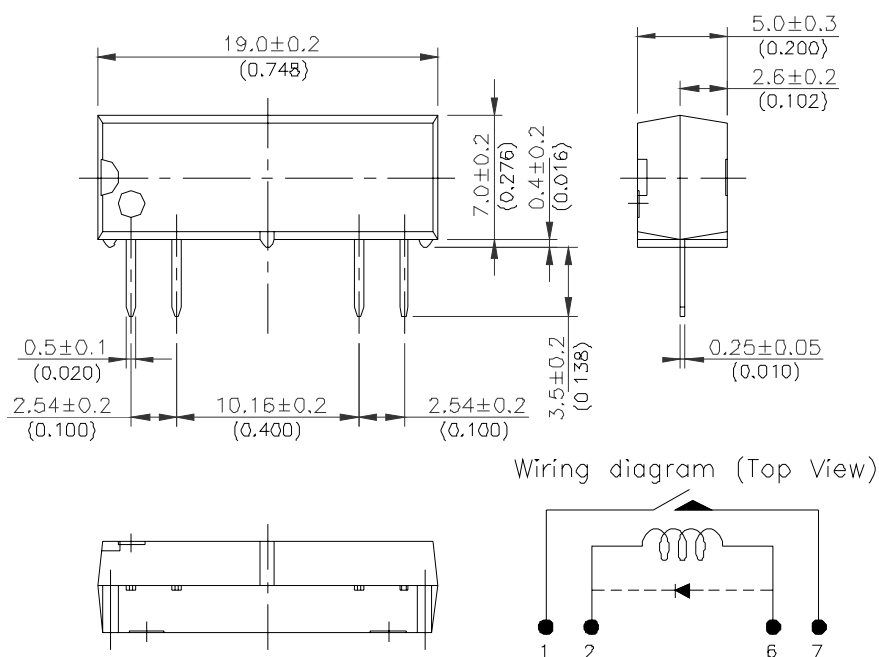
DIMENSIONS Unit:mm(inch)

EDR10(D)1AXXXX (PIN OUT 1357)



DIMENSIONS Unit:mm(inch)

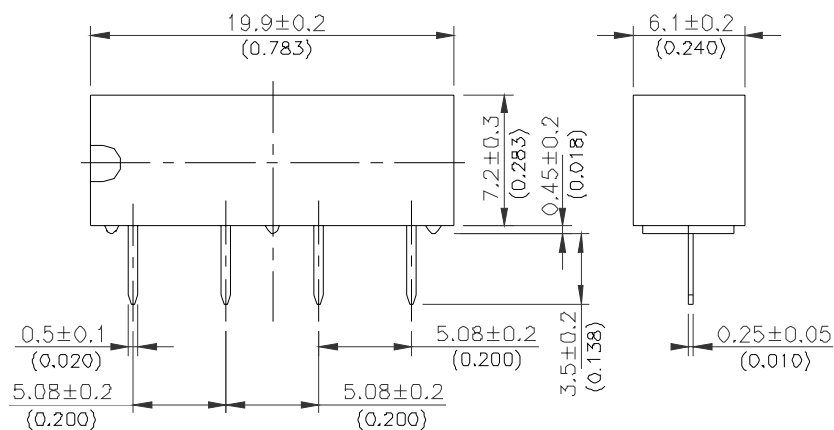
EDR10(D)1AXX5X (PIN OUT 1267)



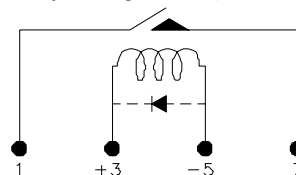
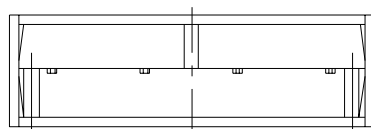
SIP TYPE

DIMENSIONS Unit:mm(inch)

EDR1M(N)1AXXXX (PIN OUT 1357)

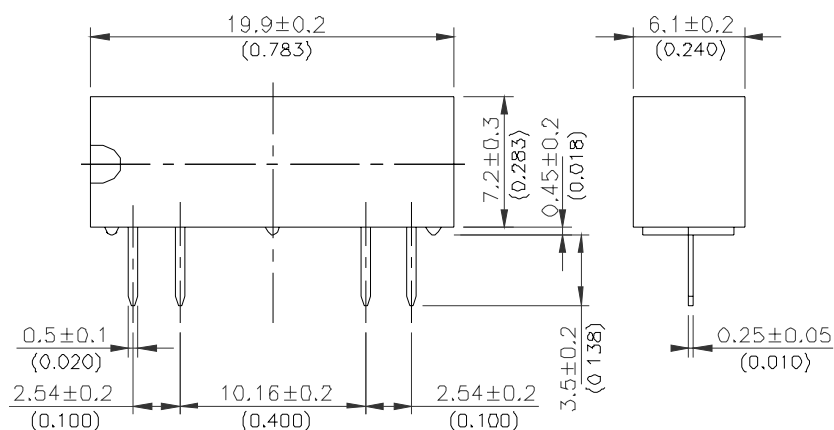


Wiring diagram (Top View)

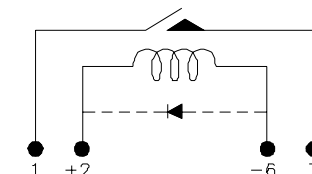
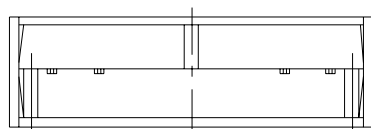


DIMENSIONS Unit:mm(inch)

EDR1M(N)1AXX5X (PIN OUT 1267)

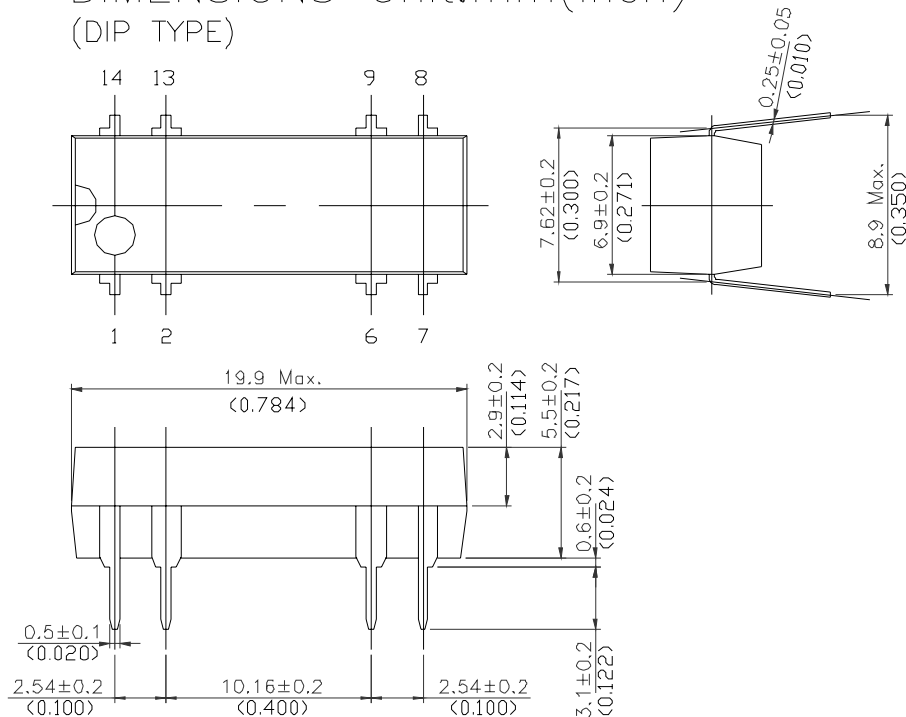


Wiring diagram (Top View)

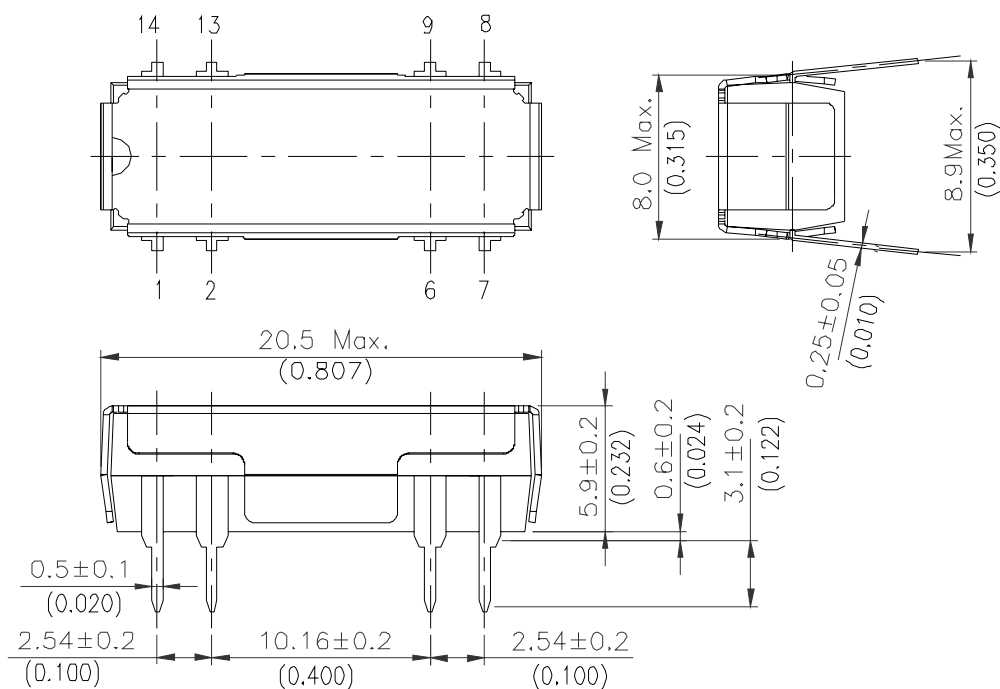


DIP TYPE / SMD TYPE

DIMENSIONS Unit:mm(inch)
(DIP TYPE)



DIMENSIONS UNIT:mm(inch)
EDR2M(N)XXXXXXZ



Technical drawing of a component with dimensions and tolerances:

- Overall length: 199 Max. (0.784)
- Overall width: $10.2 \pm 0.3 \text{ (0.402)}$
- Top flange thickness: $7.62 \pm 0.2 \text{ (0.300)}$
- Bottom flange thickness: $6.9 \pm 0.2 \text{ (0.271)}$
- Flange width: $0.25 \pm 0.05 \text{ (0.010)}$
- Top flange width: $0.5 \pm 0.1 \text{ (0.020)}$
- Bottom flange width: $0.5 \pm 0.1 \text{ (0.020)}$
- Top flange width (inner): $2.9 \pm 0.2 \text{ (0.114)}$
- Bottom flange width (inner): $5.5 \pm 0.2 \text{ (0.217)}$
- Top flange width (outer): $5.8 \pm 0.2 \text{ (0.228)}$
- Top flange width (inner, left): $0.4 \pm 0.2 \text{ (0.100)}$
- Top flange width (inner, right): $2.54 \pm 0.2 \text{ (0.100)}$
- Top flange width (inner, center): $10.16 \pm 0.2 \text{ (0.400)}$

Technical drawing of a rectangular metal component, showing three views: top, side, and front elevation.

Top View Dimensions:

- Overall width: 20.5 Max. (0.807)
- Overall height: 10.2 ± 0.3 (0.402)
- Distance from left edge to centerline: 0.5 ± 0.1 (0.020)
- Distance from centerline to right edge: 0.25 ± 0.05 (0.010)

Side View Dimensions:

- Overall height: 8.0 Max. (0.315)
- Distance from top edge to centerline: 10.2 ± 0.3 (0.402)

Front Elevation Dimensions:

- Overall width: 20.5 Max. (0.807)
- Overall height: 5.9 ± 0.2 (0.232)
- Distance from top edge to centerline: 6.2 ± 0.2 (0.244)
- Distance from left edge to centerline: 10.16 ± 0.2 (0.400)
- Distance from centerline to right edge: 2.54 ± 0.2 (0.100)

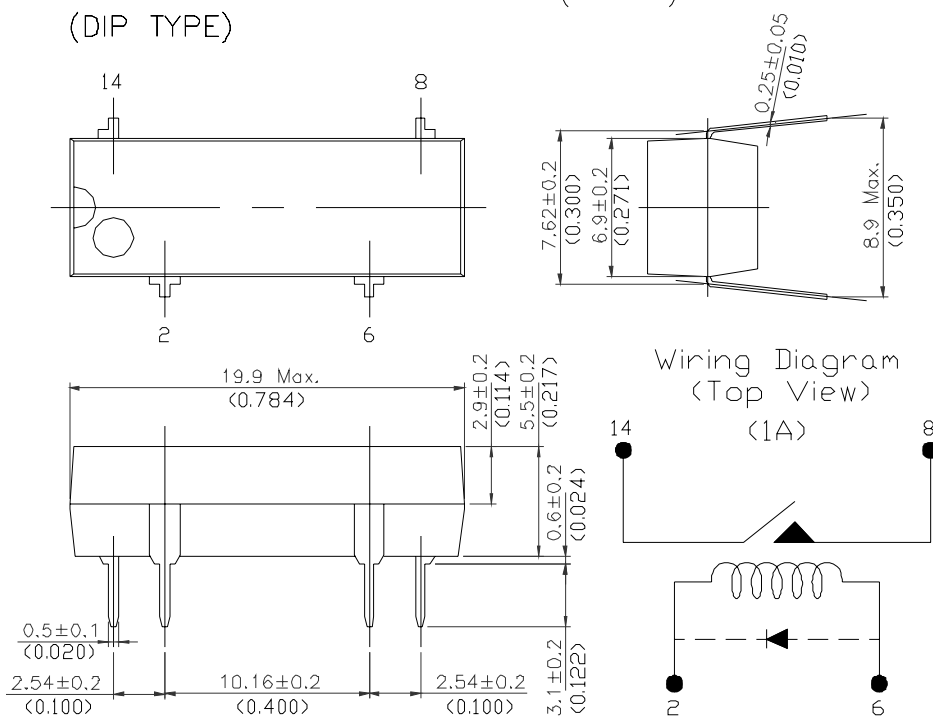
Callouts:

- 14, 13, 9, 8: Top edge callouts
- 1, 2, 6, 7: Bottom edge callouts

Figure 1 shows five schematic diagrams of test systems, labeled (1A) standard, (1A), (1B), (1C), and (2A). Each diagram illustrates a circuit configuration with various components and terminals. The terminals are numbered 1 through 14. The diagrams show different internal connections and components, such as switches, coils, and diodes, which are used to test the system's performance under various conditions.

HIGH INSULATION TYPE

DIMENSIONS Unit:mm(inch)
(DIP TYPE)



DIMENSIONS Unit:mm(inch)
(SMD-SO TYPE)

