

EP2 SERIES

FEATURES

- Twin relay for motor and solenoid reversible control
- 50% less relay space than conventional two relays
- Contact switching current of 30 A max.
- High performance and productivity by unique symmetrical structure
- Flux tight housing
- Delivered in stick-tube for automatic insertion machine
- Washable type available



PART NUMBERS AND COIL RATINGS

At 20°C (68°F)

Part Number		Nominal Voltage (Vdc)	Coil Resistance ($\Omega \pm 10\%$)	Nominal Current (mA)	Must Operate Voltage (Vdc)	Must Release Voltage (Vdc)	Nominal Operate Power (W)
H bridge Type	Separate Type						
EP2-3N1S	EP2-3N1ST	12	225	53.3	6.5	0.9	0.64
EP2-3N2S	EP2-3N2ST	12	225	53.3	7.0	0.9	0.64
EP2-3N3S	EP2-3N3ST	12	225	53.3	7.5	0.9	0.64
EP2-4N3S	EP2-4N3ST	12	300	40.0	7.5	0.9	0.48
EP2-4N4S	EP2-4N4ST	12	300	40.0	8.0	0.9	0.48
EP2-4N5S	EP2-4N5ST	12	300	40.0	8.5	0.9	0.48

PART NUMBER SYSTEM

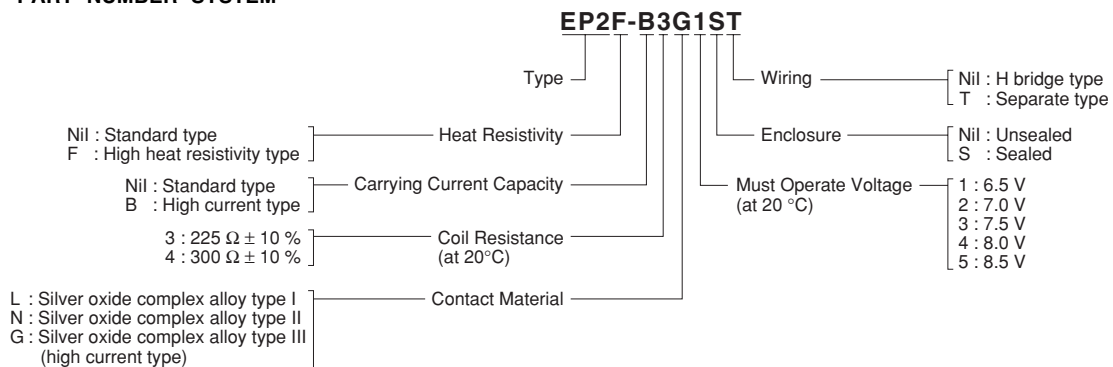
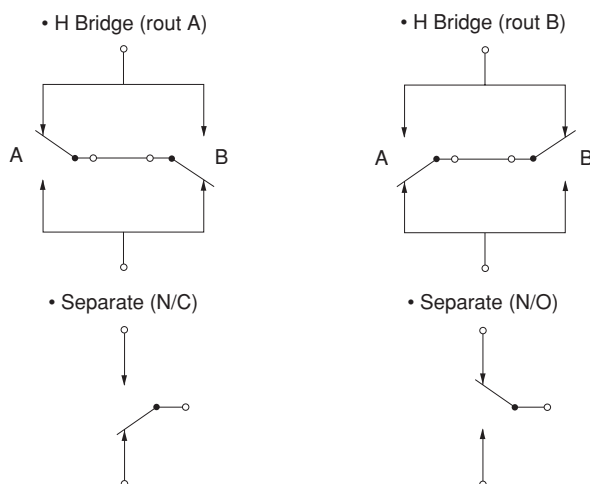
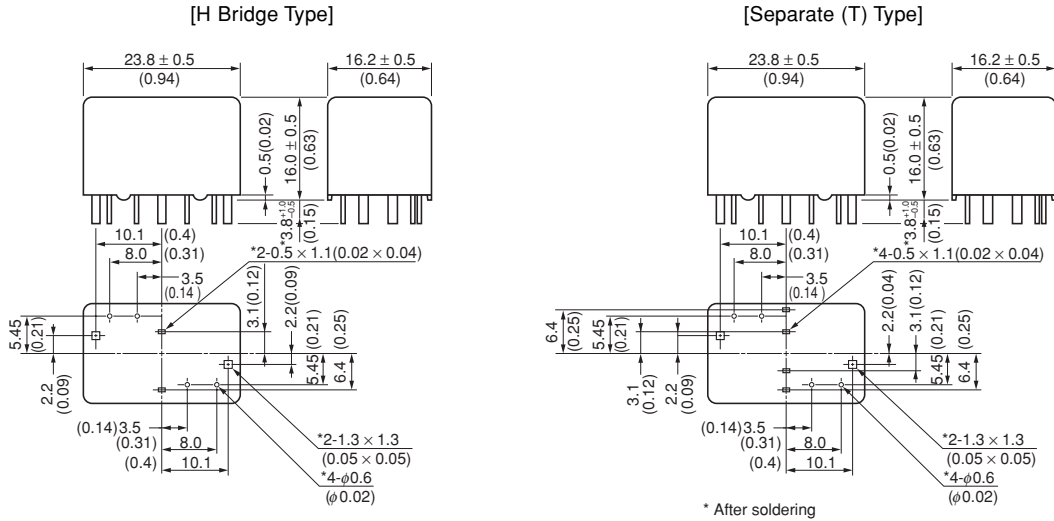


Figure 1 Contact Resistance*

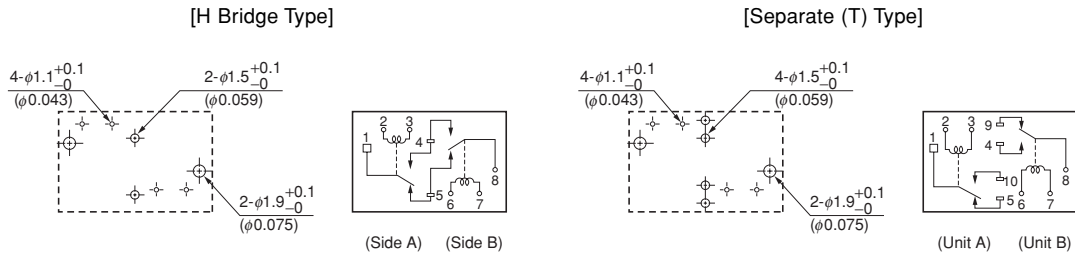


● All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact NEC Tokin for updated product data.
 ● Please request for a specification sheet for detailed product data prior to the purchase.
 ● Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.

DIMENSIONS mm (inch)



PCB PAD LAYOUT and SCHEMATICS (bottom view) mm (inch)



SPECIFICATIONS

At 20°C (68°F)

Items	Specification	
	EP2- (Standard)	EP2-B (High Current)
Contact Form	1 Form c × 2 (H Bridge Type or Separate Type)	
Contact Material	Silver oxide complex alloy (Special types available)	
Contact Resistance (* figure 1) (measured by voltage drop at 6Vdc, 7A)	H Bridge (rout A): 10.7 mΩ typ. H Bridge (rout B): 10.4 mΩ typ. Separate (N/C): 5.2 mΩ typ. Separate (N/O): 5.2 mΩ typ.	H Bridge (rout A): 6.7 mΩ typ. H Bridge (rout B): 6.4 mΩ typ. Separate (N/C): 3.2 mΩ typ. Separate (N/O): 3.2 mΩ typ.
Contact Switching Voltage	16 Vdc max. 5 Vdc min.	
Contact Switching Current	30A max. (at 16 Vdc) 1A min.	
Contact Carrying Current (2 minutes max.)	25A (12 Vdc, 20°C) 20A (12 Vdc, 85°C)	30A (12Vdc, 20°C) 25A (12Vdc, 85°C)
Operate Time	Approx. 5 ms (at 12 Vdc)	
Release Time	Approx. 7 ms (at 12 Vdc), with diode	
Nominal Operate Power	0.48 W/0.64 W (at 12 Vdc)	
Insulation Resistance	100 MΩ min. at 500 Vdc, Initial	
Breakdown Voltage	500 Vac min. for 1 minute, Initial	
Shock Resistance	98 m/s ² min. (misoperating)	
Vibration Resistance	10 to 300 Hz, 43 m/s ² min. (misoperating)	
Ambient Temperature	-40°C to +85°C (-40°F to +185°F)	
Coil Temperature Rise	50°C/W (Contact Carrying Current 0 A)	
Life Expectancy	Mechanical	1 × 10 ⁶ operations
	Electrical	1 × 10 ⁵ operations (at 14 Vdc, Motor Load 25 A/5 A)
Weight	Approx. 15 g	



- All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact NEC Tokin for updated product data.
- Please request for a specification sheet for detailed product data prior to the purchase.
- Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.