SPECIFICATION OF EP2F – N70 / EP2F – N71 / EP1F – N70 RELAY

EMOS05-2077
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Solution Engineering Division
Networking Devices Operations Unit
NEC TOKIN Corporation

SPECIFICATIONS

at 20ºC

Items		Specifications		
		EP2F-N70	EP2F-N71	EP1F-N70
Contact Form		1 form C x 2 (H bridge type)	1 form C x 2 (Separate type)	1 form C
Contact Material		Silver oxide complex alloy		
Contact Resistance (initial). (measured at 6Vdc, 7 A)		6.7 mΩ typical	3.2 mΩ typocal	5.2 mΩ typical
Contact Switching Voltage		16 Vdc max.		
Contact Switching Current		30 A max. (at 16 Vdc)		
Contact Carrying Current		30 A max. (1 hour max.) 35 A max. (2 minutes max. at 12 Vdc)		35 A max. (1 hour max.) 40 A max. (2 minutes max. at 12 Vdc)
Operate Time		Approx. 5 ms (excluding bounce at 12 Vdc) initial		
Release Time		Approx. 2 ms (excluding bounce at 12 Vdc without diode) initial		
Insulation Resistance		100 MΩmin. (at 500 Vdc) initial		
Breakdown Voltage		500 Vac min. (for 1 minute) initial		
Shock Resistance		98 m / s^2 [Approx. 10 G] min. (misoperating) 980 m / s^2 [Approx. 100 G] min. (destructive failure)		
Vibration Resistance		10 to 300 Hz, 43 m / s2 [Approx. 4.4 G] min. (misoperating)		
Ambient Temperature		–40 °C to +125 °C (–40 °F to +257 °F)		
Coil Temperature Rise		50 °C / W (without contact carrying current)		
Life Expectancy	Mechanical	1 x 10^6 operations		
	Electrical	1 X 10^5 operations (at 14 Vdc, Motor Load 25 A / 7 A)		
Enclosure		Sealed		
Weight		Approx. 15 gr		Approx. 8 gr

COIL RATING

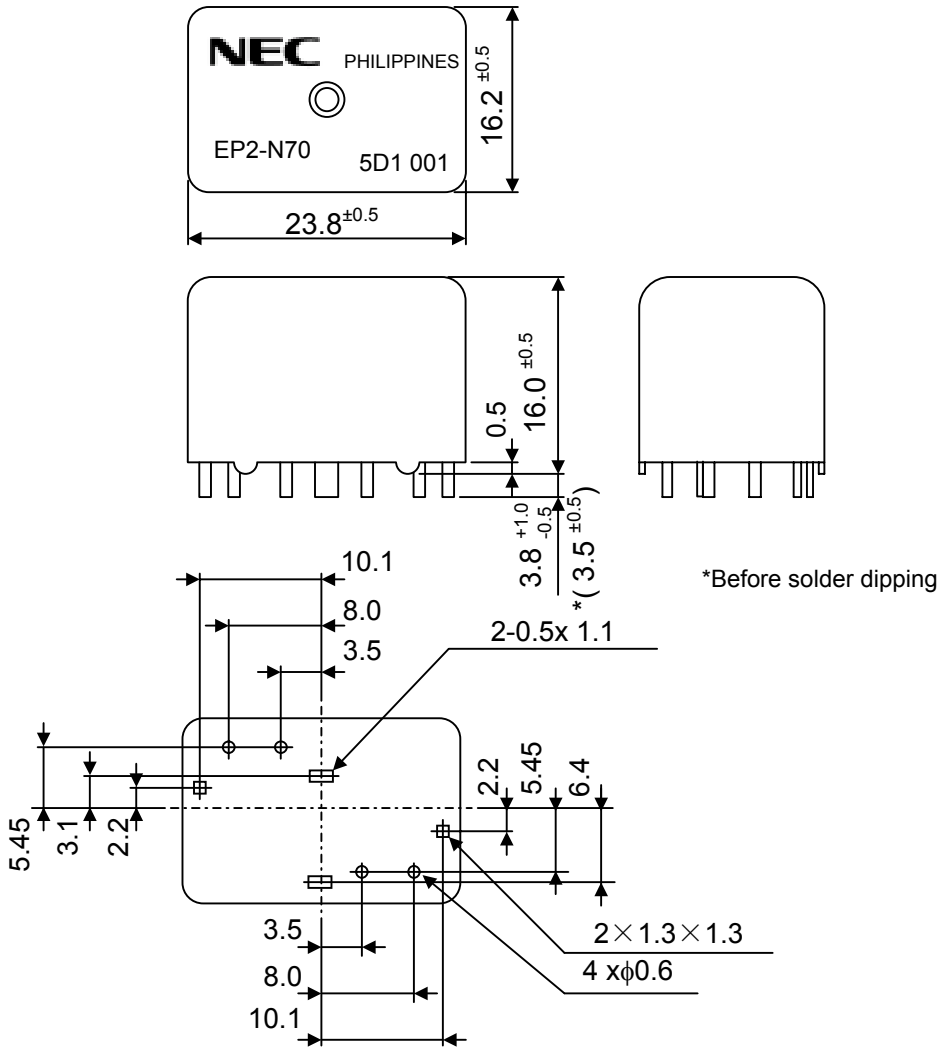
at 20ºC

Part No.	Nominal Voltage (Vdc)	Coil Resistance (±10 %)	Must Operate Voltage (Vdc max.)	Must Release Voltage (Vdc min.)	Nominal Operate Power (W)
EP2F – N70	12	225	6.5	0.9	0.64
EP2F – N71	12	225	6.5	0.9	0.64
EP1F – N70	12	225	6.5	0.9	0.64

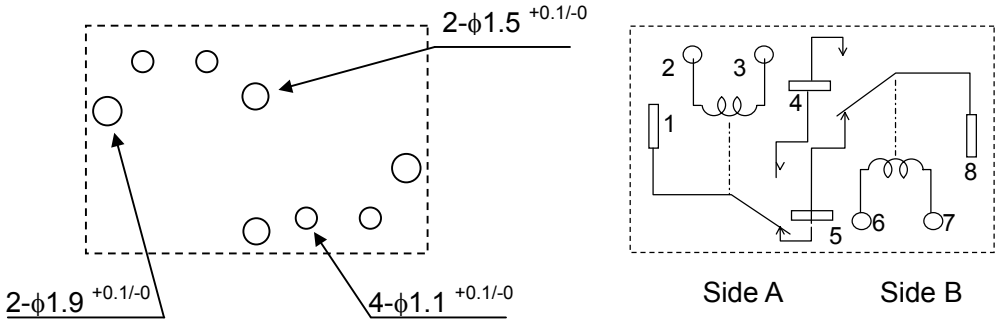
DIMENSIONS / PCB PAD LAYOUT (BOTTOM VIEW) / SCHEMATICS (Unit: mm)

EP2F – N70

DIMENSIONS



PCB PAD LAYOUT (BOTTOM VIEW) / SCHEMATICS

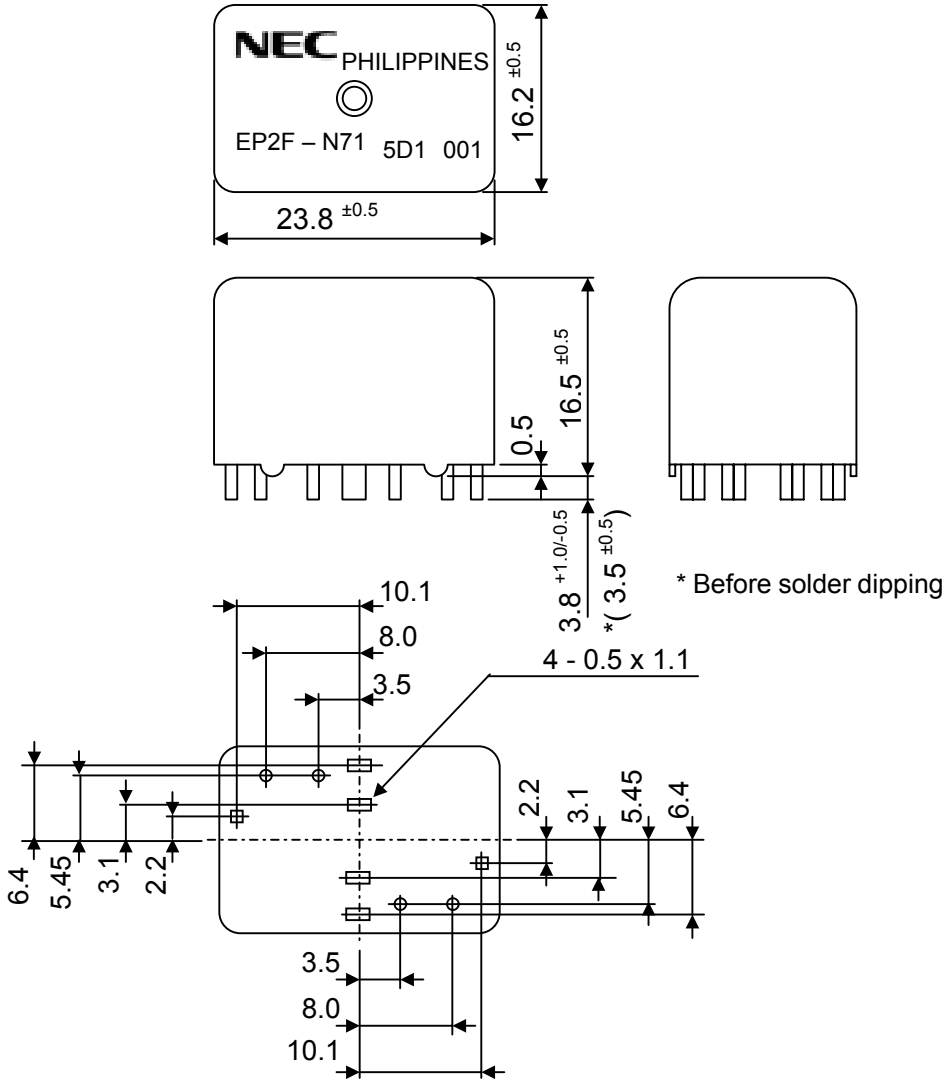


(Unit:mm)

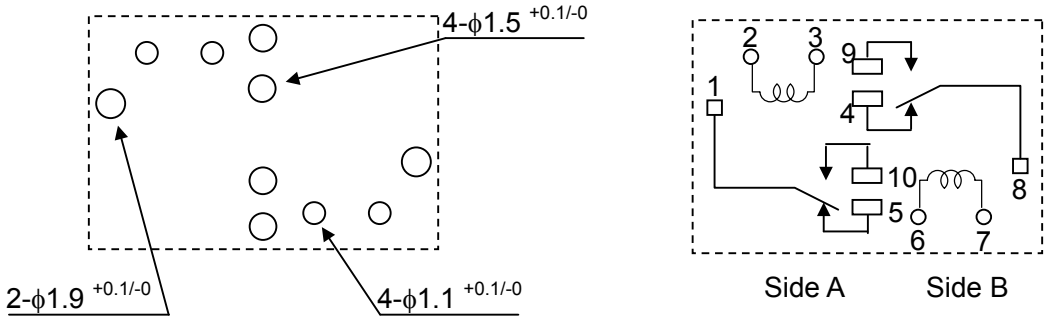
This information is subject to change without notice in order to improve.

EP2F – N71

DIMENSIONS



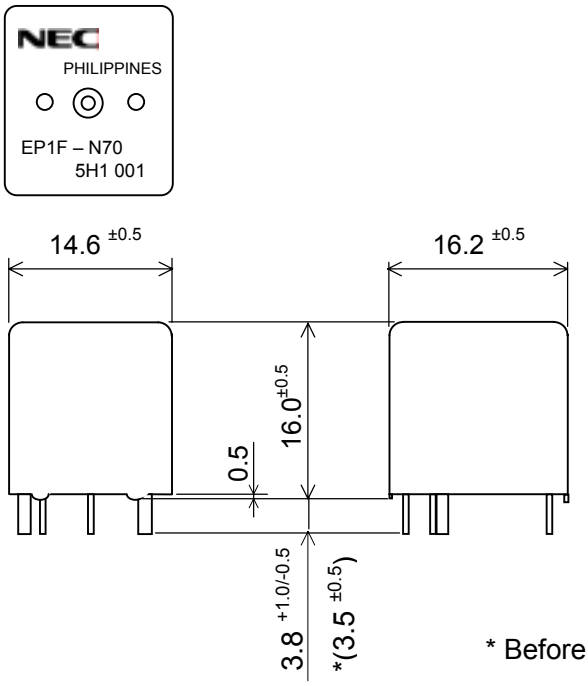
PCB PAD LAYOUT (BOTTOM VIEW) / SCHEMATICS



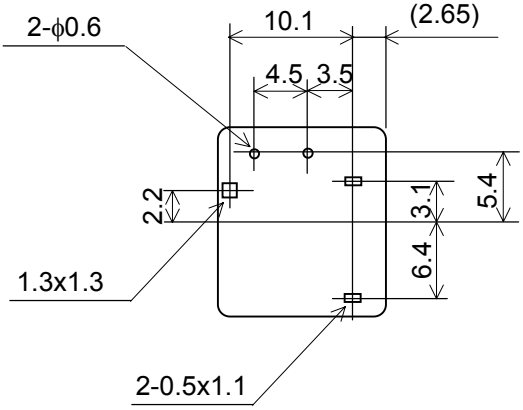
(Unit:mm)

EP1F – N70

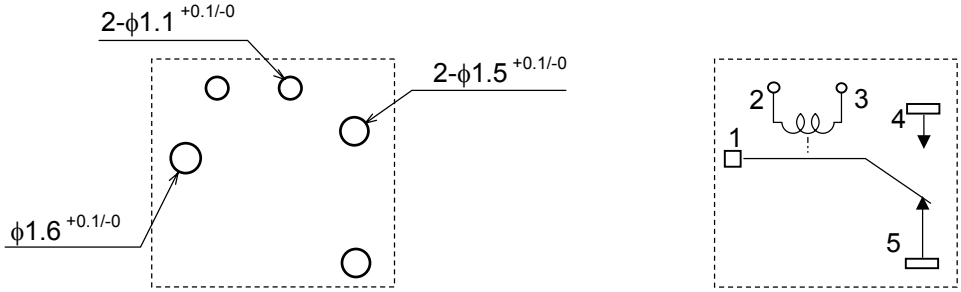
DIMENSIONS



* Before solder dipping



PCB PAD LAYOUT (BOTTOM VIEW) / SCHEMATICS



(Unit:mm)

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