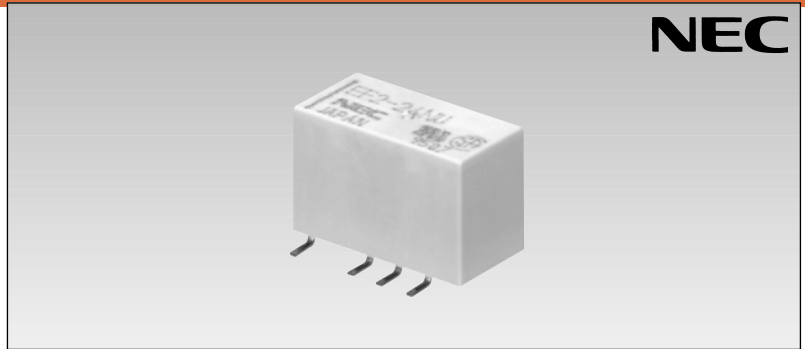


- Compact and Light Weight
- 2 Form C Contact Arrangement
- Low Power Consumption (50mW)
- Reduced Mounting Space: 15mm x 7.5mm
- High-breakdown Voltage of Coil to Contacts: 1500 Vac, 2500 V (2 x 10 μs*)
- UL Recognised, CSA Certified
- Tube or Taped Packaging

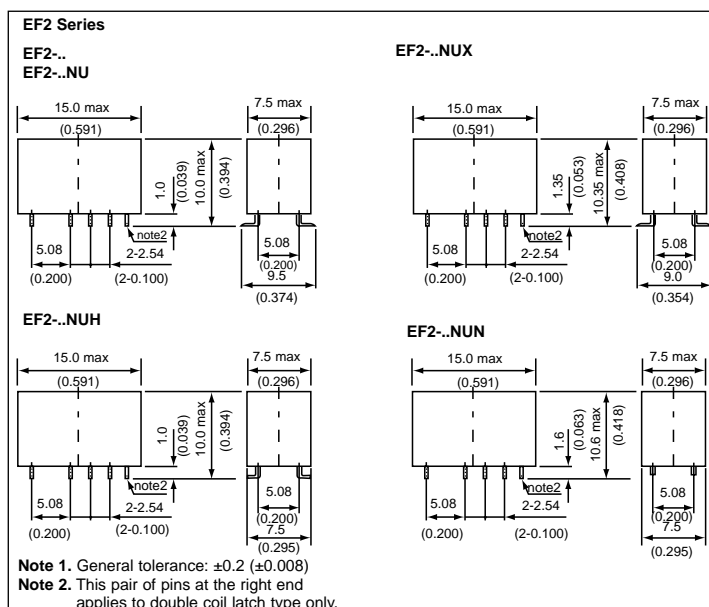


Specifications

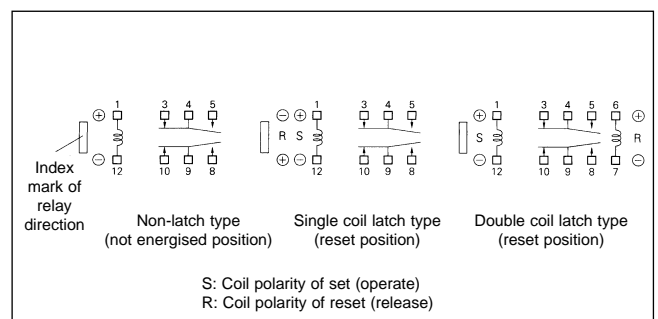
Contact form		2 Form C
Contact material		Silver alloy with gold alloy overlay
Contact rating	Maximum switching power	30W 62.5 VA (resistive)
	Maximum switching voltage	220VDC 250 VAC
	Maximum switching current	1A
	Maximum carrying current	1A
Minimum contact ratings		100 mVDC, 100 μA
Initial contact resistance		50 mΩ typ.
Nominal operating power	Nonlatch type	50 to 70 mW
	Single coil latch type	30 to 60 mW
	Double coil latch type	50 to 80 mW
Operate time (excluding bounce)		Approximately 3 ms without diode
Release time (excluding bounce)		Approximately 2 ms without diode
Insulation resistance		1000 MΩ at 500 V dc
Breakdown voltage	Between open contacts	1000 VAC for one minute (1500 V surge, 10 x 16μs*)
	Between adjacent contacts	1000 V surge for one minute (1500 V surge, 10 x 160μs*)
	Between coil to contacts	1500 VAC (for one minute) 2500V surge (2 x 10 μs*)
Shock resistance		735 m/s ² (75G) (misoperating) 980 m/s ² (100G) (destructive failure)
Vibration resistance		10-55Hz, double amplitude 3 mm (20G) (misoperating) 10-55Hz, double amplitude 5 mm (30G) (destructive failure)
Ambient temperature		-40°C to +70°C
Coil temperature rise		7 degrees at nominal coil voltage (50 mW)
Running specifications	Nonload	1 x 10 ⁷ operations 50 VDC, 0.1A (resistive) 1 x 10 ⁶ operations at 85°C 10 VDC, 10 mA (resistive) 1 x 10 ⁶ operations at 85°C
	Load	
Weight		Approximately 2.2 g

*1 rise time: 10 μs, fall time: 160 μs *2 rise time: 2 μs, fall time: 10 μs

Dimensions mm (inch)



Schematics



Part Number System

EF2-5 S NUH

Feature

- Nil : Standard type
- NU : UL recognised CSA certified type
- NUX : High solder joint reliability (20 years)
- NUH : Minimum footprint (7.5 x 15)
- NUN : High solder joint reliability with minimum footprint

Latch type

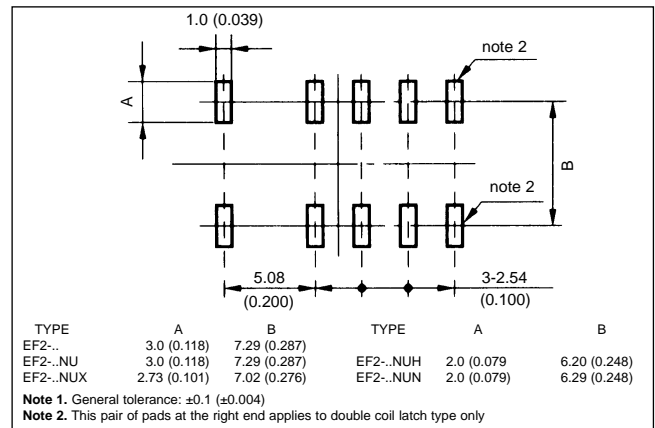
- Nil : Non latch type
- S : Single coil latch type
- T : Double coil latch type

Nominal coil voltage

- 1.5, 3, 4.5, 5, 6, 9, 12, 24 volts

EF2 series

Pad layout (bottom view) mm(inch)



Part numbers

Nonlatch type

at 20°C

Part Number	Nominal Coil Voltage VDC	Coil Resistance $\Omega \pm 10\%$	Must Operate Voltage VDC	Must Release Voltage VDC	Nominal operate power (mW)
EF2-1.5NU	1.5	45	1.20	0.15	50
EF2-3NU	3	180	2.40	0.3	50
EF2-4.5NU	4.5	405	3.60	0.45	50
EF2-5NU	5	500	4.00	0.5	50
EF2-6NU	6	720	4.80	0.6	50
EF2-9NU	9	1473	7.20	0.9	55
EF2-12NU	12	2400	9.60	1.2	60
EF2-24NU	24	8229	19.20	2.4	70

Single coil latch type

at 20°C

Part Number	Nominal Coil Voltage VDC	Coil Resistance $\Omega \pm 10\%$	Must Operate Voltage VDC	Must Release Voltage VDC	Nominal operate power (mW)
EF2-1.5SNU	1.5	75	1.20	0.13	30
EF2-3SNU	3	300	2.40	2.25	30
EF2-4.5SNU	4.5	675	3.60	3.38	30
EF2-5SNU	5	833	4.00	3.75	30
EF2-6SNU	6	1200	4.80	4.5	30
EF2-9SNU	9	2700	7.20	6.75	30
EF2-12SNU	12	4800	9.60	9	30
EF2-24SNU	24	9600	19.20	18	60

Double coil latch type

at 20°C

Part Number	Nominal Coil Voltage VDC	Coil Resistance $\Omega \pm 10\%$	Must Operate Voltage VDC	Must Release Voltage VDC	Nominal operate power (mW)	
EF2-1.5TNU	1.5	S	45	1.20	-	50
		R	45	-	1.3	
EF2-3TNU	3	S	180	2.40	-	50
		R	180	-	2.25	
EF2-4.5TNU	4.5	S	405	3.60	-	50
		R	405	-	3.38	
EF2-5TNU	5	S	500	4.00	-	50
		R	500	-	3.75	
EF2-6TNU	6	S	720	4.80	-	50
		R	720	-	4.5	
EF2-9TNU	9	S	1620	7.20	-	50
		R	1620	-	6.75	
EF2-12TNU	12	S	2880	9.60	-	50
		R	2880	-	9	
EF2-24TNU	24	S	7200	19.20	-	80
		R	7200	-	18	

Note S: Set Coil (pin No. 1 and 12) R: Reset Coil (pin No. 6 and 7)