

EF2 Series



The EF2 series is surface-mounting type sustaining high-performance of NEC TOKIN ED2 series.

■ FEATURES

- Low power consumption(30 to 70 mW)
- Compact and light weight
- 2 form c contact arrangement
- Reduced mounting space: 15 mm × 9.5 mm
- High-breakdown voltage of coil to contacts: 1500 VAC, 2500 V, (2 × 10 μs*3)
- UL recognized (E73266), CSA certified (LR46266)

■ SPECIFICATIONS

Contact Form		2 Form c
Contact Material		Silver alloy with gold alloy overlay
Contact Ratings	Maximum Switching Power	30 W, 62.5 VA
	Maximum Switching Voltage	220 VDC, 250 VAC
	Maximum Switching Current	1 A
	Maximum Carrying Current	2 A
Minimum Contact Ratings		10 mVDC, 10 μA*1
Initial Contact Resistance		75 mΩ max.(Initial)
Nominal Operating Power	Non-latch type	50 mW (1.5 to 5 V), 55 mW (9 V), 60 mW (12 V), 70 mW (24 V)
Operate Time (Excluding bounce)		Approx. 2 ms
Release Time (Excluding bounce)		Approx. 1 ms without diode
Insulation Resistance		1000 MΩ at 500 VDC
Withstand Voltage	Between open contacts	1000 VAC (for one minute)
	Between adjacent contacts	1500 V surge (10 × 160 μs*2)
	Between coil to contacts	1500 VAC (for one minute) 2500 V surge (2 × 10 μs*3)
Shock Resistance		735 m/s ² (misoperating), 980 m/s ² (destructive failure)
Vibration Resistance		10 to 55 Hz, double amplitude 3 mm (misoperating) 10 to 55 Hz, double amplitude 5 mm (destructive failure)
Ambient Temperature		-40 to +85°C
Coil Temperature Rise		7 degrees at nominal coil voltage (50 mW)
Running Specifications	Non-load	1 × 10 ⁸⁻⁴ operations(Non-latch type) 1 × 10 ⁷ operations(latch type)
	Load	50 VDC, 0.1 A (resistive) 1 × 10 ⁶ operations at 85°C, 5 Hz 10 VDC, 10 mA (resistive) 1 × 10 ⁶ operations at 85°C, 2 Hz
Weight		Approx. 2.2 g

*1 This value is a reference value in the resistance load.

Minimum capacity changes depending on switching frequency and environment temperature and the load.

*2 rise time : 10 μs, decay time to half crest : 160 μs

*3 rise time : 2 μs, decay time to half crest : 10 μs

*4 This shows a number of operation where it can be running by which a fatal defect is not caused, and a number of operation by which a steady characteristic is maintained is 1×10⁷ operations.



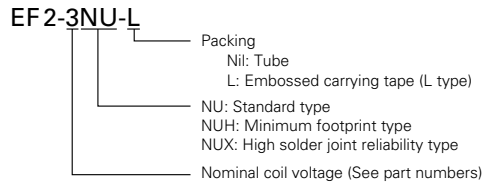
● All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact NEC TOKIN for updated product data.

● 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.

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■ PART NUMBER SYSTEM



■ SAFETY STANDARD AND RATING

UL Recognized (UL508)* File No. E73266	CSA Certified (CSA C22.2 No14) File No. LR46266
30 VDC, 1 A (Resistive)	
110 VDC, 0.3 A (Resistive)	
125 VAC, 0.5 A (Resistive)	

* Spacing : UL114, UL478

TUV Certified (EN61810)
No. R9950557
Non-latch and Single-coil-latch
Creepage and clearance of coil to contact is over than 2 mm. (According to EN60950)
Basic insulation class

■ COIL SPECIFICATIONS

• Non-latch Type

at 20°C

Nominal Coil Voltage (VDC)	Coil Resistance (Ω) \pm 10%	Must Operate Voltage* (VDC)	Must Release Voltage* (VDC)	Nominal Operating Power (mW)
1.5	45	1.13	0.15	50
3	180	2.25	0.3	50
4.5	405	3.38	0.45	50
5	500	3.75	0.5	50
9	1473	6.75	0.9	55
12	2400	9.0	1.2	60
24	8229	18.0	2.4	70

* Test by pulse voltage



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