



14,3 x 7,5 (15,7) x 13,8

RoHS compliant

NF125

Single & Twin

Features

- Small size, light weight.
- Low power consumption.
- Reflow soldering version available (opened vent hole, high heat resistance)
- Switching capacity up to 25A motor lock load.
- Sealed washable or flux protection for reflow soldering (open vent hole type)
- Twin type (2 relays in 1 case) is available (independent 2 circuits)
- Suitable for DC motor control for automotive comfort applications (door lock, power window, sunroof, seat)

Ordering Information

<u>NF125</u>	<u>001</u>	<u>E</u>	<u>12</u>	<u>L</u>	<u>R</u>	<u>T</u>	<u>XXXX</u>
1	2	3	4	5	6	7	8
1. Type:		NF125 = Single NF125T = Twin					6. Protection: Nil = Standard R = Reflow soldering version
2. Contact configuration:		001 = 1CO (1 form C)					7. Packaging: Nil = Standard T = Tape and reel packaging
3. Contact material:		E = Ag alloy					8. Special code: XXXX = Letters and / or number for special customer design
4. Coil voltage:		12 = 12VDC					
5. Characteristics:		Nil = Standard L = Low operating voltage					

Contact Data

Contact Arrangement	1C SPDT (B-M)		
Contact Material	AgSnO ₂		
Contact Current	25A motor lock (14VDC)		
Max. Switching Power	480W		
Max. Switching Voltage	16VDC	Max. Switching Current:30A	
Contact Resistance or Voltage drop	< 250mV (at 10A)	Item 4.12 of IEC 61810-7	
Operation life	Electrical	10 ⁵	Item 4.30 of IEC 61810-7
	Mechanical	10 ⁶	Item 4.31 of IEC 61810-7

Coil Parameter

Model	Coil voltage VDC		Coil resistance Ω ±10%	Pickup voltage VDC(max)	Release voltage VDC(min) (8.3% of rated voltage)	Coil power consumption W	Operate Time ms	Release Time ms
	Rated	Max.						
Standard	12	16	225	7.2	1.0	0.64	<10	<5
	12	16	225	7.2	1.0	2 x 0.64		
L	12	16	180	6.5	1.0	0.80	<10	<5
	12	16	180	6.5	1.0	2 x 0.80		

CAUTION: 1.The use of any coil voltage less than the rated coil voltage will compromise the operation of the relay.
2.Pickup and release voltage are for test purposes only and are not to be used as design criteria.

Operation condition

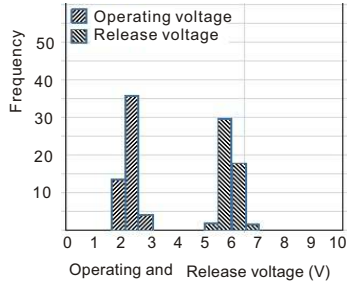
Insulation Resistance	100MΩ min (at 500VDC)	Item 7 of IEC 60255-5
Dielectric Strength Between contacts Between contact and coil	50Hz 500V 50Hz 500V	Item 6 of IEC 60255-5 Item 6 of IEC 60255-5
Shock resistance	98m/s ² 11ms	IEC 68-2-27 Test Ea
Vibration resistance	10Hz~55Hz Acceleration: 43.1m/s ²	IEC 68-2-6 Test Fc

Operation condition (continued)

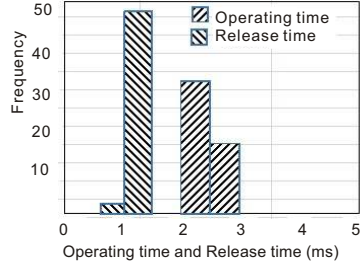
Terminals strength	5N	IEC 68-2-21 Test Ua1
Solderability	260°C ± 5°C 5s ± 0.5s	IEC 68-2-20 Test Ta method 1
Ambient Temperature	-40°C ~ 85 °C (105°C reflow version only)	
Relative Humidity	85% (at 40°C)	IEC 68-2-3 Test Ca
Mass	4.1g / 8.2g	
Packaging	NF125: 80pcs / tube; 2400pcs / box	NF125T: 36pcs / tube; 1080pcs / box

Reference Data

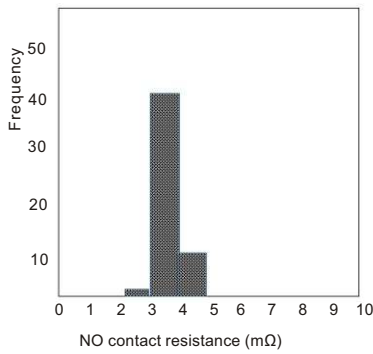
Sample: NF125 single 12VDC standard 50pcs



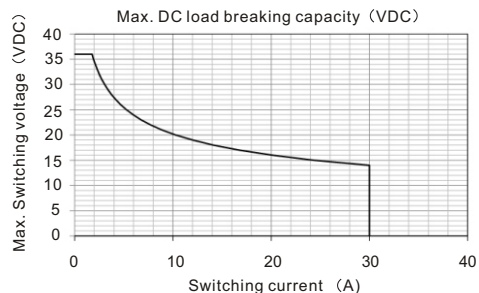
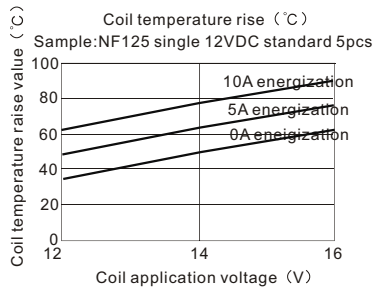
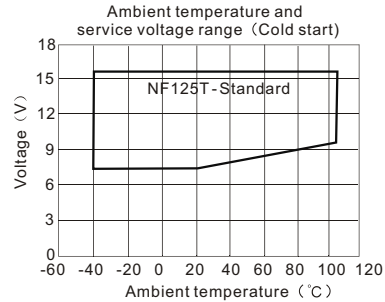
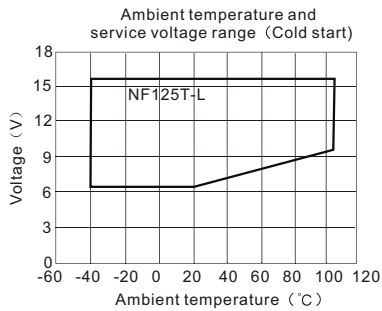
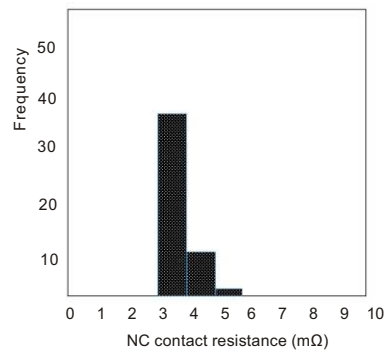
Sample: NF125 single 12VDC standard 50pcs
Diode to absorb coil surge, without resistor



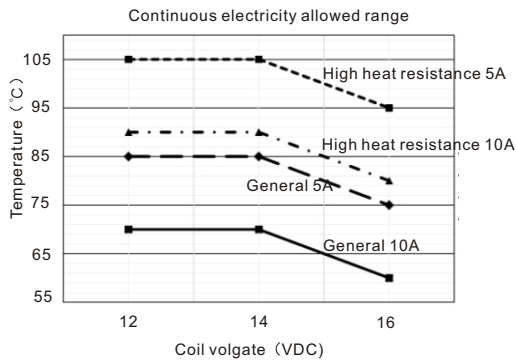
Sample: NF125 single 12VDC standard 50pcs



Sample: NF125 single 12VDC standard 50pcs



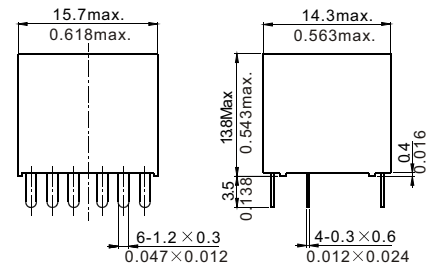
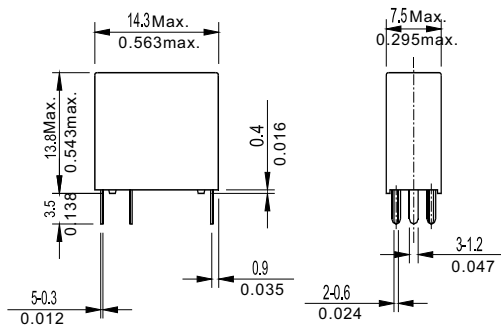
Reference Data (continued)



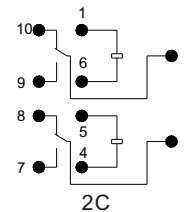
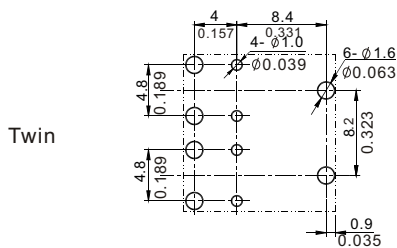
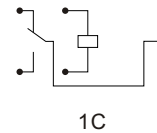
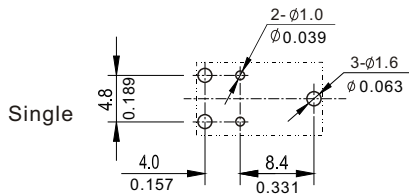
Note:
 Contact electric current :5A (10A for reference date)
 Max. Coil temperature general 155°C
 Max. Coil temperature high heat resistance 180°C

Dimensions

mm /inch



Dimensions



Mounting (Bottom view)

Wiring diagram (Bottom view)

NOTES 1).Dimensions are in millimeters.
 2).Inch equivalents are given for general information only.

Disclaimer

All technical performance data apply to the relay as such, specific conditions of the individual application are not considered. Please always check the suitability of the relay for your intended purpose. We do not assume any responsibility or liability for not complying herewith. We recommend to complete our questionnaire and to request our technical service. Any responsibility for the application of the product remains with the customer only. All specifications are subject to change without notification. All rights of NF Forward GmbH & NF Forward USA Inc. are reserved.