



14 X 9 X 5 (14 X 9 X 5.3)



Features	
<ul style="list-style-type: none"> • DIL Pitch Terminals & SMT „L“ shaped terminals; High Sensitivity : 0.14W Nominal Power • Conforms to FCC Part 68 1.5kV Surge and Dielectric 1000VAC • Application for Telecommunication Equipment, Office Equipment, Security Alarm Systems, Measuring instruments, Medical Monitoring Equipment, Audio Visual Equipment, Flight Simulator, Sensor Control 	

Ordering Information				
<u>ST3</u>	<u>002</u>	<u>H</u>	<u>12</u>	<u>SM</u>
1	2	3	4	5
1. Type:	ST3		4. Coil voltage:	
2. Contact arrangement:	002 = 2C		5 = 5VDC; 6 = 6VDC; 9 = 9VDC;	
3. Contact material:	H = AgPd + Au Clad		12 = 12VDC; 24 = 24VDC;	
			5. Protection:	
			W = Sealed; SM = SMT Version;	

Contact Data		
Contact Arrangement	2C (DPDT(B-M)) (Bifurcated Crossbar)	
Contact Material	AgPd(Gold clad)	
Contact Rating (resistive)	1A,2A/30VDC; 0.5A/125VAC	
Max. Switching Power	60W 62.5VA Min. Switching load: 0.01mA/10mV (Reference Value)	
Max. Switching Voltage	220VDC 250VAC Max. Switching Current:2A	
Contact Resistance or Voltage drop	≤50mΩ Item 4.12 of IEC 61810-7	
Operation life	Electrical	1A/30VDC: 2×10 ⁵ 0.5A/125VAC: 1×10 ⁵ Item 4.30 of IEC 61810-7
	Mechanical	10 ⁸ Item 4.31 of IEC 61810-7

CAUTION:
Relays previously tested or used above 10mA resistive at 6V maximum (DC or peak AC) open circuit are not recommended for subsequent use in low level applications.

Dash numbers	Coil voltage VDC		Coil resistance Ω ±10%	Pick up voltage VDC(max) (75% of rated voltage)	Release voltage VDC(min) (10% of rated voltage)	Coil power W	Operate Time ms	Release /Reset Time ms
	Rated	Max.						
P-005	5	12.5	178	3.75	0.5	0.14	Approx.2	Approx.1
P-006	6	15.0	257	4.50	0.6	0.14		
P-009	9	22.5	579	6.75	0.9	0.14		
P-012	12	30.0	1028	9.00	1.2	0.14		
P-024	24	48.0	2880	18.0	2.4	0.20		

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

Characteristics		
Electrostatic capacitance		
Between open Contacts	Approx.0.4pF	Item 4.41 of IEC 61810-7
Between coil & Contacts	Approx.0.9pF	Item 4.41 of IEC 61810-7
Between Contact Poles	Approx.0.2pF	Item 4.41 of IEC 61810-7
Insulation Resistance	1000MΩ min (at 500VDC)	Item 7 of IEC 60255-5
Dielectric Strength		
Between open Contacts	1000VAC 1min	Item 6 of IEC 60255-5
Between coil & Contacts	1000VAC 1min	Item 6 of IEC 60255-5
Between Contact Poles	1000VAC 1min	Item 6 of IEC 60255-5
Surge Withstand Voltage		
Between open Contacts	1500V	FCC 68
Between coil & Contacts	1500V	FCC 68
Between Contact Poles	2500V	FCC 68

Characteristics (continued)

Shock resistance	Functional: 500m/s ² 11ms; Survival: 1000 m/s ² 6ms	IEC 68-2-27 Test Ea
Vibration resistance	10Hz~55Hz Double amplitude Functional: 3mm Survival: 5mm	IEC 68-2-6 Test Fc
Terminals strength	5N	IEC 68-2-21 Test Ua1
Solderability	235 °C ± 2°C 3s ± 0.5s	IEC68-2-20 Test Ta method 1
Temperature Range	-40~85 °C (-40° F~158° F)	
Mass	Approx. 1.5g	

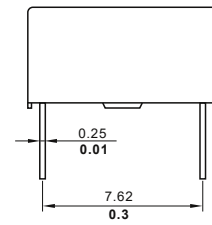
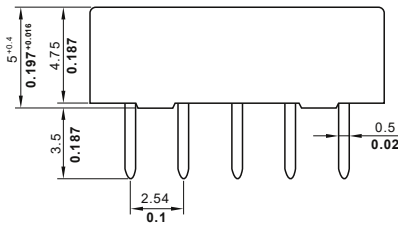
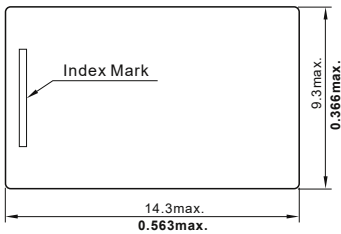
Safety approvals

Safety approval	UL&CUR	
Load	1A, 2A/30VDC, 0.5A/125VAC	

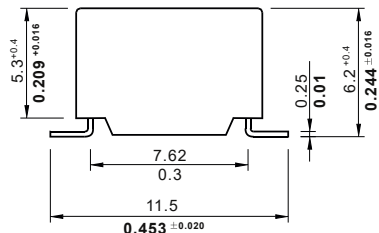
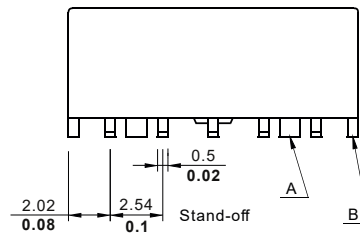
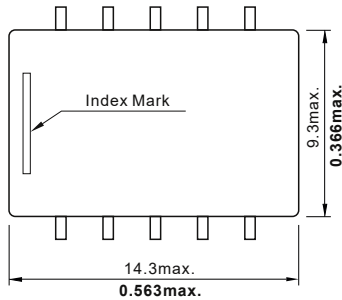
Dimensions

mm/inch

Dimensions

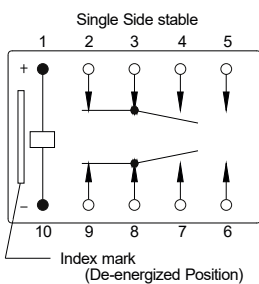


THT Version

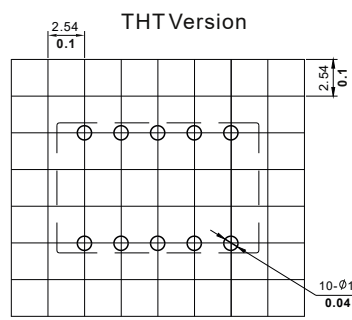


SMT Version

Wiring diagram (Bottom view)

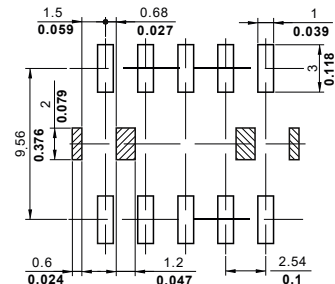


Mounting (Bottom view)



Tolerance: ±0.1/±0.004

SMT Version



□ Soldering Pad (for Terminal)

▨ Temporary glue Pad (for Stand-off A or B)

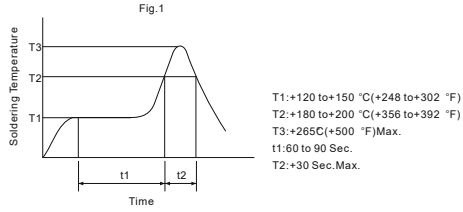
Tolerance ±0.1/±0.004

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

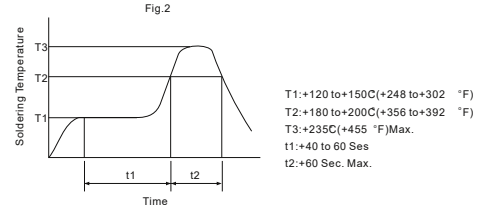
SOLDERING and MOUNTING RECOMMENDATIONS

1. Conditions for Terminal Soldering by reflow soldering method

a. In case of Infrared Soldering

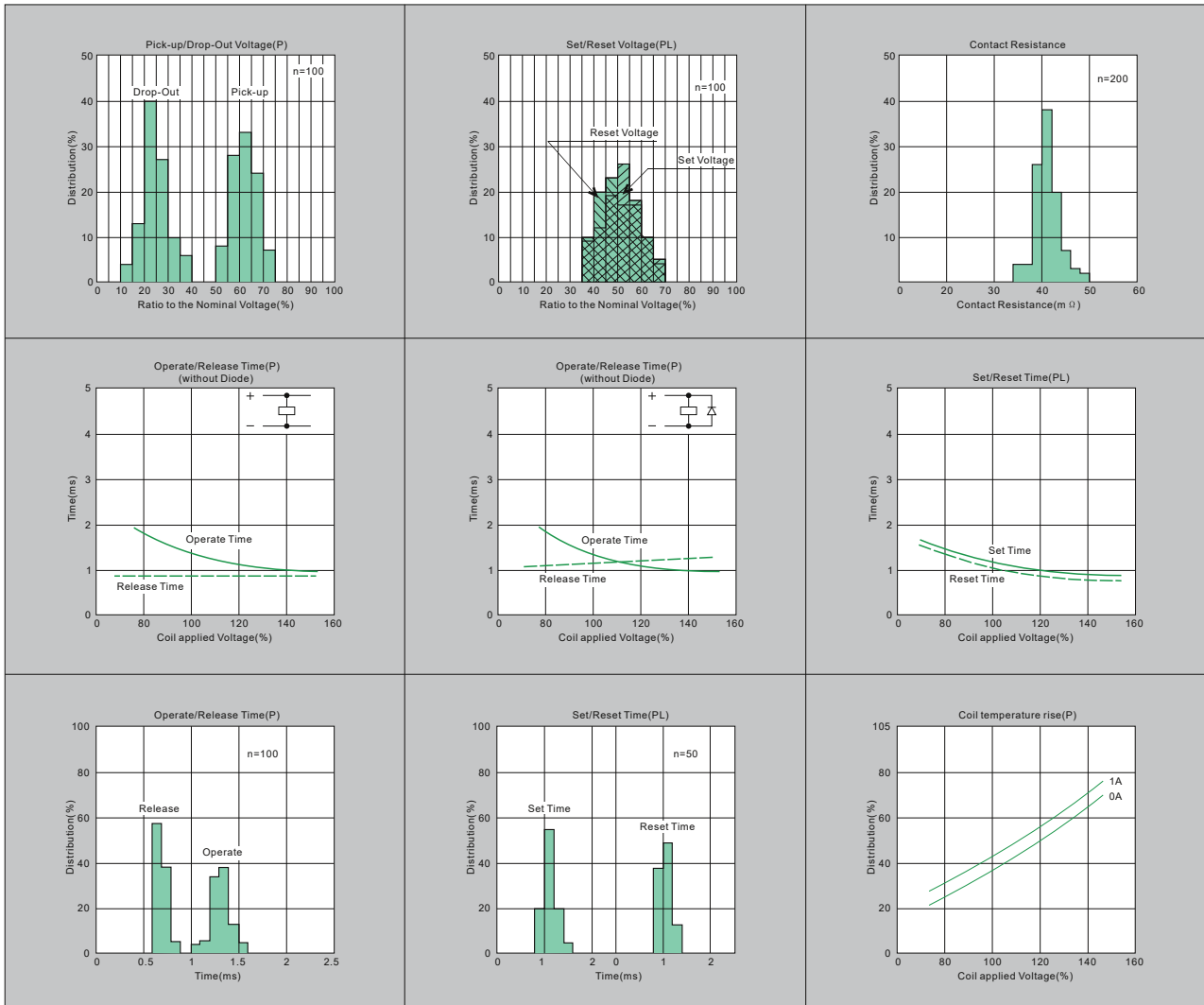
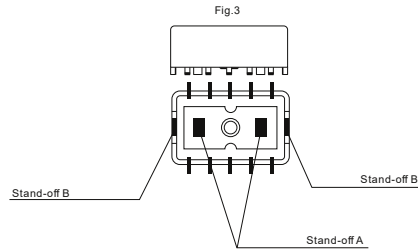


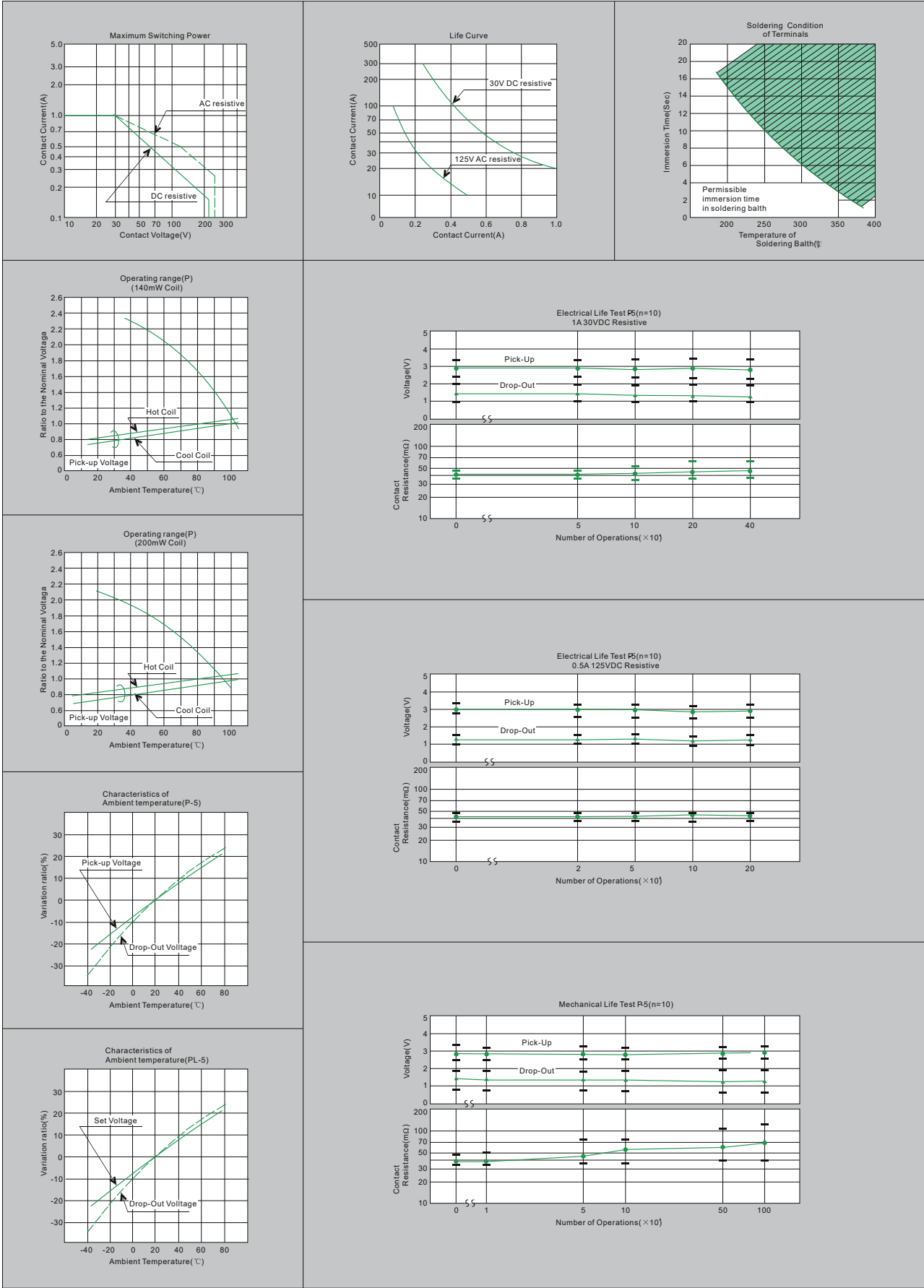
b. In case of Vapor Phase Soldering



2. Usage of Stand-Off A & B in BaseArea

The Stand-Offs shown in the Fig. 3 are designed to Anchor Relays temporarily to PC Board with glue before Terminal Soldering.





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.