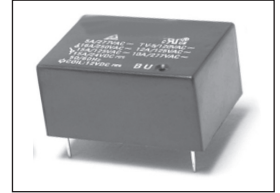


FEATURES

- SWITCHING CAPABILITY TO 16A IN FLAT FORM STYLE
- 1,000VAC DIELECTRIC STRENGTH
- IEC 60335-1 GLOW WIRE AVAILABLE
- UL CLASS F INSULATION AVAILABLE
- RoHS AND REACH COMPLIANT
- ALSO AVAILABLE HALOGEN FREE
- UL FILE NUMBER E513045

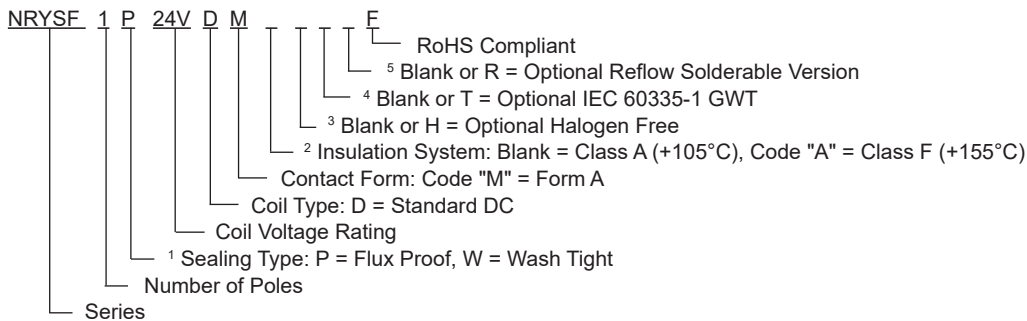


*See Part Number System for Details

CHARACTERISTICS

| Type | SPST |
|--------------------------|--|
| Rated Load (Resistive) | 15A 125VAC/10A 277VAC/16A 250VAC (TÜV)/15A 24VDC (TÜV) |
| Contact Capacity | 1/4HP 125/250VAC/TV-5 120VAC |
| Rated Carrying Current | 16A |
| Allowable Voltage (Max.) | AC 270V |
| Allowable Current (Max.) | 16A |
| Allowable Power (Max.) | 4,000VA/360W |
| Operation | Single Pole, Single Throw |
| Contact Material | Ag Alloy |

PART NUMBER SYSTEM



OVERALL DIMENSIONS (mm): 22.2 x 16.2 x 11.0 (see page 3 for other dimensions)

INITIAL PERFORMANCE SPECIFICATIONS

| Item | Performance |
|-----------------------|--|
| Contact Resistance | 100mΩ Max.@1A,6VDC |
| Operate Time | 20mSec. Max. |
| Release Time | 10mSec. Max. |
| Dielectric Strength | Between Coil and Contact - 1,500VAC 50Hz/60Hz for 1 minute |
| | Between Contacts - 1,000VAC 50Hz/60Hz for 1 minute |
| Surge Strength | 5,000V (between Coil & Contact 1.2x50µSec.) |
| Insulation Resistance | 100MΩ min. at 500VDC |
| Max. On/Off Switching | Electrical - 6 cycles per minute |
| | Mechanical - 300 cycles per minute |
| Temperature Range | -40°C ~ +85°C |
| Humidity Range | 45% ~ 85% Relative Humidity |
| Coil Temperature Rise | +35°C max. |
| Vibration | Destruction - 10 to 55 to 10 Hz, 0.75 mm single amplitude (1.5mm double amplitude) |
| | Malfunction - 10 to 55 to 10 Hz, 0.75 mm single amplitude (1.5mm double amplitude) |
| Shock | Destruction - 1,000m/S ² |
| | Malfunction - 100m/S ² |
| Life Expectancy | Electrical - 10 ⁵ Operations at Rated Resistive Load |
| | Mechanical - 10 ⁷ Operations at No load condition |
| Component Weight | 8.5g |

DC COIL SPECIFICATIONS AT +20°C (FLUX PROOF, FORM A, AgSnO, STANDARD INSULATION)

| Part Number | Coil Voltage | Coil Voltage Code | Nominal Current (mA) | Coil Resistance ($\Omega \pm 10\%$) | Power Consumption Coil Sensitivity | Pull-In Voltage | Drop-Out Voltage | Maximum Allowable Voltage |
|----------------|--------------|-------------------|----------------------|---------------------------------------|---------------------------------------|-----------------|------------------|---------------------------|
| | | | DC Coil | | | | | |
| NRYSF1P5VDMF | 5 | 5V | 40 | 125 | 0.20 | 70% max. | 5% min. | 150% |
| NRYSF1P9VDMF | 9 | 9V | 23 | 405 | | | | |
| NRYSF1P12VDMF | 12 | 12V | 17 | 720 | | | | |
| NRYSF1P24VDMF | 24 | 24V | 8.3 | 2,880 | | | | |
| NRYSF1P48VDMF | 48 | 48V | 4.2 | 11,520 | | | | |
| NRYSF1P100VDMF | 100 | 100V | 5.6 | 18,000 | 0.56 | | | |

* See part numbering system for available options and appropriate code. Contact NIC for reflow solderable and glow wire options.

DC COIL SPECIFICATIONS AT +20°C (WASH TIGHT, FORM A, AgSnO, STANDARD INSULATION)

| Part Number | Coil Voltage | Coil Voltage Code | Nominal Current (mA) | Coil Resistance ($\Omega \pm 10\%$) | Power Consumption Coil Sensitivity | Pull-In Voltage | Drop-Out Voltage | Maximum Allowable Voltage |
|----------------|--------------|-------------------|----------------------|---------------------------------------|---------------------------------------|-----------------|------------------|---------------------------|
| | | | DC Coil | | | | | |
| NRYSF1W5VDMF | 5 | 5V | 40 | 125 | 0.20 | 70% max. | 5% min. | 150% |
| NRYSF1W9VDMF | 9 | 9V | 23 | 405 | | | | |
| NRYSF1W12VDMF | 12 | 12V | 17 | 720 | | | | |
| NRYSF1W24VDMF | 24 | 24V | 8.3 | 2,880 | | | | |
| NRYSF1W48VDMF | 48 | 48V | 4.2 | 11,520 | | | | |
| NRYSF1W100VDMF | 100 | 100V | 5.6 | 18,000 | 0.56 | | | |

* See part numbering system for available options and appropriate code. Contact NIC for reflow solderable and glow wire options.

DC COIL SPECIFICATIONS AT +20°C (FLUX PROOF, FORM A, AgSnO, F CLASS INSULATION)

| Part Number | Coil Voltage | Coil Voltage Code | Nominal Current (mA) | Coil Resistance ($\Omega \pm 10\%$) | Power Consumption Coil Sensitivity | Pull-In Voltage | Drop-Out Voltage | Maximum Allowable Voltage |
|-----------------|--------------|-------------------|----------------------|---------------------------------------|---------------------------------------|-----------------|------------------|---------------------------|
| | | | DC Coil | | | | | |
| NRYSF1P5VDMAF | 5 | 5V | 40 | 125 | 0.20 | 70% max. | 5% min. | 150% |
| NRYSF1P9VDMAF | 9 | 9V | 23 | 405 | | | | |
| NRYSF1P12VDMAF | 12 | 12V | 17 | 720 | | | | |
| NRYSF1P24VDMAF | 24 | 24V | 8.3 | 2,880 | | | | |
| NRYSF1P48VDMAF | 48 | 48V | 4.2 | 11,520 | | | | |
| NRYSF1P100VDMAF | 100 | 100V | 5.6 | 18,000 | 0.56 | | | |

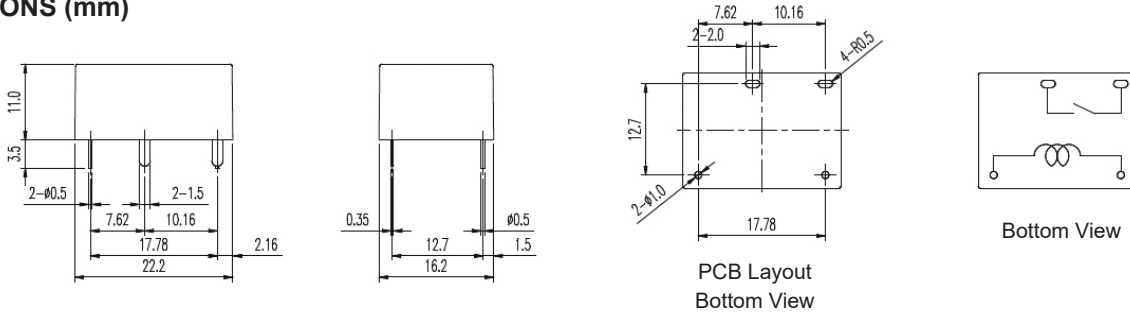
* See part numbering system for available options and appropriate code. Contact NIC for reflow solderable and glow wire options.

DC COIL SPECIFICATIONS AT +20°C (WASH TIGHT, FORM A, AgSnO, F CLASS INSULATION)

| Part Number | Coil Voltage | Coil Voltage Code | Nominal Current (mA) | Coil Resistance ($\Omega \pm 10\%$) | Power Consumption Coil Sensitivity | Pull-In Voltage | Drop-Out Voltage | Maximum Allowable Voltage |
|-----------------|--------------|-------------------|----------------------|---------------------------------------|---------------------------------------|-----------------|------------------|---------------------------|
| | | | DC Coil | | | | | |
| NRYSF1W5VDMAF | 5 | 5V | 40 | 125 | 0.20 | 70% max. | 5% min. | 150% |
| NRYSF1W9VDMAF | 9 | 9V | 23 | 405 | | | | |
| NRYSF1W12VDMAF | 12 | 12V | 17 | 720 | | | | |
| NRYSF1W24VDMAF | 24 | 24V | 8.3 | 2,880 | | | | |
| NRYSF1W48VDMAF | 48 | 48V | 4.2 | 11,520 | | | | |
| NRYSF1W100VDMAF | 100 | 100V | 5.6 | 18,000 | 0.56 | | | |

* See part numbering system for available options and appropriate code. Contact NIC for reflow solderable and glow wire options.

DIMENSIONS (mm)



Note: Dimension tolerances are ± 0.2 mm for items ≤ 5 mm and ± 0.3 mm for items > 5 mm. Tolerance of PCB holes is ± 0.1 mm.

TUBE PACKAGING

| Package Quantities | |
|--------------------|-------|
| Parts Per Tube | 24 |
| Tubes Per Box | 50 |
| Parts Per Box | 1,200 |