

## SPECIFICATION SHEET

|                                |                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>SPECIFICATION SHEET NO.</b> | N0423-Y32FSS112DML01                                                                                                                                                                                                                                                                                                                       |
| <b>DATE</b>                    | April. 23, 2021                                                                                                                                                                                                                                                                                                                            |
| <b>REVISION</b>                | A0                                                                                                                                                                                                                                                                                                                                         |
| <b>DESCRIPTION</b>             | <p>Sealed Subminiature High Power Relay Y32F series,<br/>L18.5*W10.2*H15.5mm, 4 Pins</p> <p>Material of contact: Silver Alloy, Contact form: 1A (C/O)</p> <p>Coil power: 0.45 W, Switching current: 5A Max</p> <p>Nominal voltage 12 VDC</p> <p>Package: 100pcs/inner box , 1000pcs/Carton in Bulk</p> <p>RoHS III and REACH Compliant</p> |
| <b>CUSTOMER</b>                |                                                                                                                                                                                                                                                                                                                                            |
| <b>CUSTOMER PART NUMBER</b>    |                                                                                                                                                                                                                                                                                                                                            |
| <b>CROSS REF. PART NUMBER</b>  |                                                                                                                                                                                                                                                                                                                                            |
| <b>ORIGINAL PART NUMBER</b>    | Y32F-SS-112DM                                                                                                                                                                                                                                                                                                                              |
| <b>PART CODE</b>               | Y32FSS112DML01                                                                                                                                                                                                                                                                                                                             |

|                         |                                                                                     |                                                                                      |                                                                                       |
|-------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>VENDOR APPROVE</b>   |                                                                                     |                                                                                      |                                                                                       |
| Issued/Checked/Approved |  |  |  |
| DATE: Apr.23, 2021      |                                                                                     |                                                                                      |                                                                                       |

|                         |
|-------------------------|
| <b>CUSTOMER APPROVE</b> |
|                         |
| DATE:                   |

## SEALED SUBMINIATURE HIGH POWER RELAY Y32F SERIES

### MAIN FEATURE

- Material of contact: Silver Alloy, Contact Form: 1A (C/O)
- Coil power: 0.45W
- Switching current: 5A Max.
- Nominal voltage 12 VDC
- Cross main competitors parts HF32F and more
- RoHS/RoHS III compliant



### APPLICATION

- Office equipment and Security alarm system
- Home Appliance Telecommunication Equipment
- Automatic electric controlled window, automotive antenna, door lock, etc.

### PART CODE GUIDE

**RFQ**

[Request For Quotation](#)

| Y32F | SS112DM | L | 01 |
|------|---------|---|----|
| 1    | 2       | 3 | 4  |

1) Y32F: Part family Code for Sealed Subminiature High Power Relay, L18.5\*W10.2\*H15.5mm, 4 Pins

2) SS112DM: Type code for original part number SS-112DM

3) L: Thru Hole type, Package: 100pcs/inner box , 1000pcs/Carton

4) 01: Internal control code, 2 letter or digits

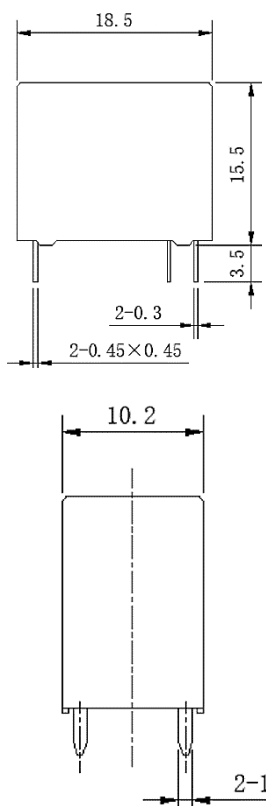
## SEALED SUBMINIATURE HIGH POWER RELAY Y32F SERIES

**DIMENSION (Unit: mm, Tol: +/-0.4mm Max.)**

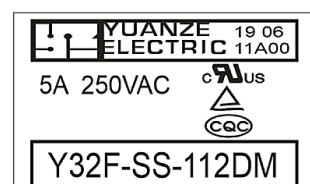
Image for reference



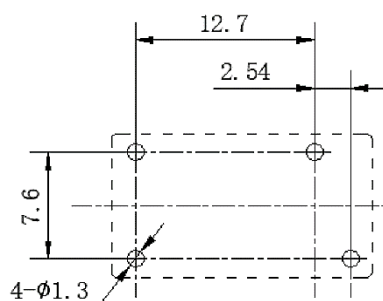
Y32F



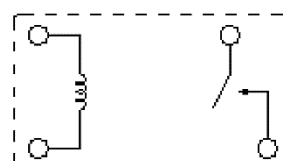
Marking  
Sample



**Wiring Diagram (Bottom View)**



**PCB Layout ( Bottom View)**



## SEALED SUBMINIATURE HIGH POWER RELAY Y32F SERIES

### GENERAL PARAMETERS

| Parameter                             | Part No. Symbol | Value                                                        |
|---------------------------------------|-----------------|--------------------------------------------------------------|
| Original Manufacturer                 | Y               | YuanZe Relay                                                 |
| Holder Type                           | 32F             | Size L18.5*W10.2*H15.5mm, 4 Pins                             |
| Enclosure                             | SS              | Flux-tight                                                   |
| Contact Pole                          | 1               | 1 Pole                                                       |
| Nominal voltage                       | 12              | 12V                                                          |
| Coil Nominal Power and Contact Rating | D               | Standard coil power, 0.45W<br>Except for Contact Rating: 10A |
| Contact arrangement                   | M               | 1 Form A                                                     |
| Contact Load                          |                 | N/A                                                          |
| Package                               | L               | Package: 100pcs/inner box , 1000pcs/Carton                   |
| Internal Control Code                 | 01              | Code- 2 letter or digits                                     |
| RoHS and REACH Status                 |                 | RoHS III and REACH Compliant                                 |
| UL certified                          |                 | File NO. E341498<br>5A 250 VAC (Resistive)                   |
| TUV certified                         |                 | File No. R50197243<br>5A 250VAC                              |
| CQC certified                         |                 | File No. CQC11002056154<br>5 A 250VDC                        |

## SEALED SUBMINIATURE HIGH POWER RELAY Y32F SERIES

### ELECTRICAL PARAMETERS

| Parameter             |                                                                   | Unit        | Value                      |              |               | Condition                    |
|-----------------------|-------------------------------------------------------------------|-------------|----------------------------|--------------|---------------|------------------------------|
|                       |                                                                   |             | Min.                       | Typ.         | Max.          |                              |
| Coil specification    | Nominal voltage                                                   | V           |                            | 12           |               | DC                           |
|                       | Coil resistance                                                   | Ω           |                            | 320          |               | ±10% at 23±5°C               |
|                       | Rated current                                                     | mA          |                            | 37.5         |               | DC ±10% at 23±5°C            |
|                       | Operate voltage                                                   | V           |                            |              | 9.0           | DC at 23±5°C                 |
|                       | Release voltage                                                   | V           | 0.6                        |              |               | DC at 23±5°C                 |
|                       | Maximum voltage                                                   | V           |                            |              | 15.6          | 130% of nominal voltage      |
|                       | Coil temperature rise                                             | K           |                            |              | 50K           | @ Coil:12V                   |
| Contact specification | Contact configuration                                             |             | SPDT (1 Form A)            |              |               |                              |
|                       | Contact rating                                                    |             | 5A 250VAC (Resistive Load) |              |               |                              |
|                       | Contact resistance                                                | mΩ          |                            |              | 100           | @DC6V 1A                     |
|                       | Operate time                                                      | ms          |                            |              | 10            |                              |
|                       | Release time                                                      |             |                            |              | 5             |                              |
|                       | operating frequency                                               | Cycle /hour |                            |              | 18000<br>1800 | Mechanically<br>Electrically |
|                       | Contact temperature rise                                          |             |                            |              | 50K           | @ Contact:10A                |
| General specification | Insulation resistance                                             | mΩ          | 1000                       |              |               | @ DC 500V                    |
|                       | Dielectric strength between open contacts between contacts & coil | V           |                            | 1000<br>4000 |               | AC 50/60 HZ for 1Minute      |
|                       | Ambient temperature                                               | °C          | -40                        |              | +85           |                              |
|                       | Relative Humidity                                                 | RH          | 45%                        |              | 85%           |                              |
|                       | Electrical life                                                   | Cycle       | 100K                       |              |               | @ NO<br>5A 250VAC            |
|                       | Mechanical life                                                   | Cycle       | 10KK                       |              |               |                              |
|                       | Switching Current                                                 | A           |                            |              | 5             |                              |
|                       | Coil Nominal Power                                                | W           | 0.45                       |              |               |                              |
|                       | Contact arrangement                                               |             | 1 Form A                   |              |               |                              |

## SEALED SUBMINIATURE HIGH POWER RELAY Y32F SERIES

### ENVIRONMENTAL CHARACTERISTICS

| Test Items                  | Test Method And Conditions                                                                                                                                                                                                                                                                            | Requirement                     |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| <b>Vibration resistance</b> | Error operation: At constant vibration of double amplitude 1.5mm, 10 ~ 55 HZ , in each direction of X,Y,Z for 5 minutes. No error operation more than 1 ms.<br>Endurance: No construction trouble when vibrate it from 3 directions for 2 hours.( Amplitude 1.5mm, 10 ~ 55 HZ)                        | It shall meet the specification |
| <b>Shock resistance</b>     | Error operation: At peak acceleration 100m/s <sup>2</sup> , duration 11ms, 3 shocks is given in each direction of X, Y, Z. No error operation more than 1 ms.<br>Endurance: No construction trouble when shock it from 3 directions 3 times at peak acceleration 1000m/s <sup>2</sup> , duration 6ms. | It shall meet the specification |
| <b>Cold resistance</b>      | No any trouble on construction or characteristic when leave relay in – 40°C±2°C for 240h. After that, leave it in standard condition for 2 hours.                                                                                                                                                     | It shall meet the specification |
| <b>Heat resistance</b>      | No any trouble on construction or characteristic when leave relay in +85°C±2°C for 240h. After that, leave it in standard condition for 2 hours.                                                                                                                                                      | It shall meet the specification |
| <b>Moisture resistance</b>  | After keeping relay for 240h in 40°C, 90%, then leave it in standard condition for 2 hours. Insulation resistance 10MΩ Min. No any trouble on construction or characteristic                                                                                                                          | It shall meet the specification |

### TERMINAL CHARACTERISTICS

| Test Items                    | Test Method And Conditions                                                                     | Requirement                                      |
|-------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------|
| <b>Terminal strength</b>      | 5N pushed into any terminals for 10 s. There shall be no abnormalities.                        | The curving of the terminals shall be acceptable |
| <b>Terminal solderability</b> | In case of lead free solder 260±5°C, 5±0.5 s , 90% of the dipped portion shall be soldered     | It shall meet the specification                  |
| <b>Soldering thermal</b>      | No any trouble on construction or characteristic. When dipped into solder bath 260±5°C, 10±1s. | It shall meet the specification                  |

## SEALED SUBMINIATURE HIGH POWER RELAY Y32F SERIES

### STANDARD TEST CONDITION

| Test Items          | Test Method And Conditions | Requirement                     |
|---------------------|----------------------------|---------------------------------|
| Ambient temperature | 23±5°C                     | It shall meet the specification |
| Relative humidity   | 25% ~ 75%                  | It shall meet the specification |
| Air pressure        | 86kPa ~ 106kPa             | It shall meet the specification |

### STORAGE CONDITION

| Test Items          | Test Method And Conditions                                                                                                                                                                                          | Requirement                     |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| Ambient temperature | -40°C ~ +85°C                                                                                                                                                                                                       | It shall meet the specification |
| Relative humidity   | 35% ~ 85%                                                                                                                                                                                                           | It shall meet the specification |
| Environment         | Store in locations where the product or container is not expose to corrosive gas such as hydrogen sulfide<br>Store in locations where no visible dust exists.<br>Store in locations not subject to direct sunlight. | It shall meet the specification |

### Reminds

- Any special requirements, please contact us.
- Under the Environment with dangerous gas such as H<sub>2</sub>S, SO<sub>2</sub> or NO<sub>2</sub>, fully sealed type is recommended.
- If the ambience allows, flux proof type is preferentially recommended.
- If the user washes the PCB and relay in the ultrasonic cleaner, fully sealed type must be selected

**SEALED SUBMINIATURE HIGH POWER RELAY Y32F SERIES****PACKAGE (Unit: mm)**

| Series No. | MPQ Inner Box<br>Pcs | Carton Dimension<br>cm | MOQ Carton<br>pcs | Net Weight<br>Kgs | Gross Weight<br>Kgs |
|------------|----------------------|------------------------|-------------------|-------------------|---------------------|
| Y32F       | 100                  | L23.0*W21.0*H17.5      | 1000              | 5.5               | 6.0                 |

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