




SPECIFICATION SHEET

SPECIFICATION SHEET NO.	N0423-YASS112DM00L01
DATE	April. 23, 2021
REVISION	A0
DESCRIPTION	<p>Sealed Subminiature High Power Relay YA series, L15.5*W12.2*H13.9mm, 4 Pins</p> <p>Material of contact: Silver Alloy, Contact form: 1A (C/O)</p> <p>Coil power: 0.60 W, Switching current: 20A Max</p> <p>Nominal voltage 12 VDC</p> <p>Package: 100pcs/inner box , 2000pcs/Carton in Bulk</p> <p>RoHS III and REACH Compliant</p>
CUSTOMER	
CUSTOMER PART NUMBER	
CROSS REF. PART NUMBER	
ORIGINAL PART NUMBER	YA-SS-112DM
PART CODE	YASS112DM00L01

VENDOR APPROVE			
Issued/Checked/Approved			
DATE: Apr.23, 2021			

CUSTOMER APPROVE	
DATE:	

SEALED SUBMINIATURE HIGH POWER RELAY YA SERIES

MAIN FEATURE

- Material of contact: Silver Alloy, Contact Form: 1A (C/O)
- Coil power: 0.60W
- Switching current: 20A Max.
- Nominal voltage 12 VDC
- Cross main competitors parts HFKW and more
- RoHS/RoHS III compliant



APPLICATION

- Automatic electric controlled window, automotive antenna, door lock, etc.

PART CODE GUIDE

RFQ

[Request For Quotation](#)

YA	SS112DM00	L	01
1	2	3	4

- 1) YA: Part family Code for Sealed Subminiature High Power Relay, L15.5*W12.2*H13.9mm, 4 Pins
- 2) SS112DM00: Type code for original part number SS-112DM
- 3) L: Thru Hole type, Package: 100pcs/inner box , 2000pcs/Carton
- 4) 01: Internal control code, 2 letter or digits

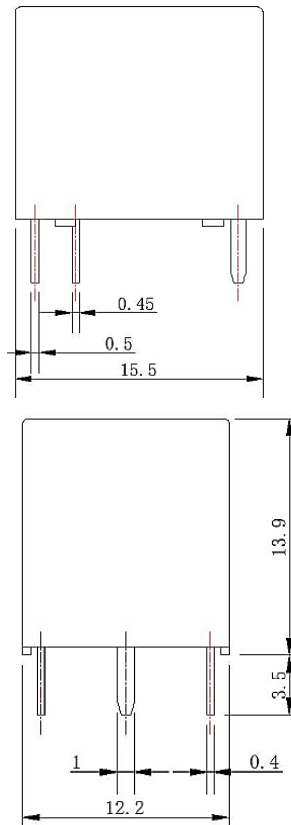
SEALED SUBMINIATURE HIGH POWER RELAY YA SERIES

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

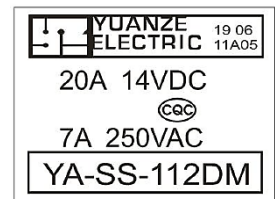
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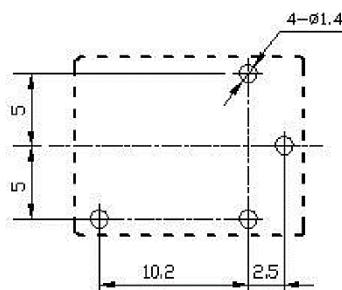
YA



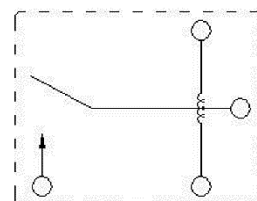
Marking
Sample



Wiring Diagram (Bottom View)



PCB Layout (Bottom View)



SEALED SUBMINIATURE HIGH POWER RELAY YA SERIES

GENERAL PARAMETERS

Parameter	Part No. Symbol	Value
Original Manufacturer	Y	YuanZe Relay
Holder Type	A	Size L15.5*W12.2*H13.9mm, 4 Pins
Enclosure	SS	Flux-tight
Contact Pole	1	1 Pole
Nominal voltage	12	12V
Coil Nominal Power	D	Standard coil power, 0.60W
Contact arrangement	M	1 Form A
Material Type		Standard
Package	L	Package: 100pcs/inner box , 2000pcs/Carton
Internal Control Code	01	Code- 2 letter or digits
RoHS and REACH Status		RoHS III and REACH Compliant
UL certified		N/A
TUV certified		N/A
CQC certified		File No. CQC19002233979 7 A 250 VAC 20A 14 VDC

SEALED SUBMINIATURE HIGH POWER RELAY YA SERIES
ELECTRICAL PARAMETERS

Parameter		Unit	Value			Condition
			Min.	Typ.	Max.	
Coil specification	Nominal voltage	V		12		DC
	Coil resistance	Ω		240		±10% at 23±5°C
	Rated current	mA		50		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		7A 250 VAC (Resistive Load) 20A 14 VDC (Resistive Load)			
	Contact resistance	mΩ			100	@DC6V 1A
	Operate time	ms			10	
	Release time				5	
	operating frequency	Cycle /hour			18000 1800	Mechanically Electrically
	Contact temperature rise				50K	@ Contact:7A/ 250VAC
General specification	Insulation resistance	mΩ	500			@ DC 500V
	Dielectric strength between open contacts between contacts & coil	V		500 500		AC 50/60 HZ for 1Minute
	Ambient temperature	°C	-40		+105	
	Relative Humidity	RH	45%		85%	
	Electrical life	Cycle	100K			@ 7A 250 VAC
	Mechanical life	Cycle	10KK			
	Switching Current	A			20	
	Coil Nominal Power	W	0.60			
	Contact arrangement		1 Form A			

SEALED SUBMINIATURE HIGH POWER RELAY YA SERIES

ENVIRONMENTAL CHARACTERISTICS

Test Items	Test Method And Conditions	Requirement
Vibration resistance	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. Endurance: No construction trouble when vibrate it from 3 directions for 2 hours.(Amplitude 1.5mm, 10 ~ 55 HZ)	It shall meet the specification
Shock resistance	Error operation: At peak acceleration 100m/s ² , duration 11ms, 3 shocks is given in each direction of X, Y, Z. No error operation more than 1 ms. Endurance: No construction trouble when shock it from 3 directions 3 times at peak acceleration 1000m/s ² , duration 6ms.	It shall meet the specification
Cold resistance	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
Heat resistance	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
Moisture resistance	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
Terminal strength	5N pushed into any terminals for 10 s. There shall be no abnormalities.	The curving of the terminals shall be acceptable
Terminal solderability	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
Soldering thermal	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 YA 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 Store in locations where no visible dust exists. Store in locations not subject to direct sunlight.	It shall meet the specification

Reminds

1. Any special requirements, please contact us.
2. Under the Environment with dangerous gas such as H₂S, SO₂ or NO₂, fully sealed type is recommended.
3. If the ambience allows, flux proof type is preferentially recommended.
4. If the user washes the PCB and relay in the ultrasonic cleaner, fully sealed type must be selected

SEALED SUBMINIATURE HIGH POWER RELAY YA SERIES

PACKAGE (Unit: mm)

Series No.	MPQ Inner Box Pcs	Carton Dimension cm	MOQ Carton pcs	Net Weight Kgs	Gross Weight Kgs
YA	100	L37.5*W28*H15.5	2000	11.0	11.8

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