FUJITSU THE POSSIBILITIES ARE INFINITE

POWER RELAY

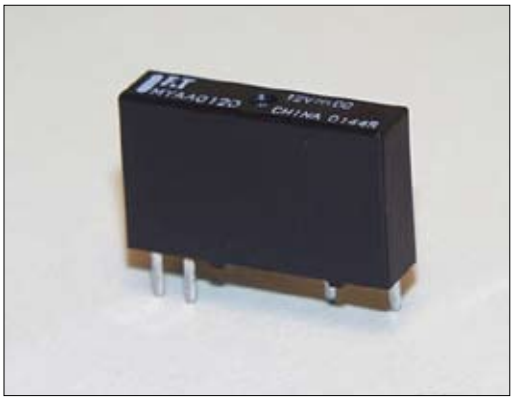
1 POLE - 5A SLIM POWER RELAY

FTR-MY Series

RoHS compliant

■ FEATURES

- Width 5mm, height 12mm,(31% smaller than NY series) area 100 mm^2, super slim , low power, compact and light weight 2.5gr.
- Nominal power: 110mW (8% less than NY series), Operate power: 54mW
  High sensitive
- High reliability, bifurcated gold overlay silver alloy (cadmium free)
- Complies with IEC 61010, 61131
- Dielectric strength: 3000VAC
- Surge strength: 5080V
- SAFETY STANDARDS
  UL, CSA, VDE, CQC
- RoHS Compliant since production
- Plastic sealed type



■ APPLICATIONS

- PLC, I/O module Inverter Control

■ ORDERING INFORMATION

	FTR-MY	A	A	012	D	– **
[Example]	(a)	(b)	(c)	(d)	(e)	(f)

(a)	Series Name	FTR-MY Series
(b)	Contact Arrangement	A : 1 Form A
(c)	Coil Type	A : 110 mW
(d)	Coil Nominal Voltage	4.5 : 4.5VDC 012 : 12 VDC 005 : 5 VDC 018 : 18 VDC 006 : 6 VDC 024 : 24 VDC 009 : 9 VDC
(e)	Contact Material	D : Gold overlay Silver alloy
(f)	Custom Designation	Special Number

Note: The designation name is stamped on the top of the relay case as follows:
Example.: Ordering code: FTR-MYAA012D Actual marking: MYAA012D

■ COIL DATA CHART

MODEL FTR-MY Series	Nominal Voltage	Coil Resistance (± 10%)	Must Operate Voltage*	Must Release Voltage*	Nominal Power
FTR-MYAA4.5D	4.5 VDC	185 Ω	3.15 VDC	0.225 VDC	110 mW
FTR-MYAA005D	5 VDC	230 Ω	3.5 VDC	0.25 VDC	110 mW
FTR-MYAA006D	6 VDC	330 Ω	4.2 VDC	0.3 VDC	110 mW
FTR-MYAA009D	9 VDC	740 Ω	6.3 VDC	0.45 VDC	110 mW
FTR-MYAA012D	12 VDC	1,310 Ω	8.4 VDC	0.6 VDC	110 mW
FTR-MYAA018D	18 VDC	2,950Ω	12.6 VDC	0.9 VDC	110 mW
FTR-MYAA024D	24 VDC	5,240Ω	16.8 VDC	1.2 VDC	110 mW

Note: All values in the table are measured at 20°C.
*: Specified values are subject to pulse

■ SPECIFICATIONS

Item			FTR-MY
Contact	Arrangement		1 form A
	Material		Gold overlay silver alloy
	Configuration		Bifurcated (Crossbar)
	Resistance (initial)		Maximum 30 mΩ (at 1 A 6 VDC)
	Rating (resistive)		5 A 250 VAC / 5A 30 VDC
	Maximum Carrying Current		5 A
	Maximum Switching Rating		1250 VA, 150W
	Maximum Switching Voltage		277 VAC, 125 VDC
	Maximum Switching Current		5 A
	Minimum Switching Load*1		5 VDC 1mA
Coil	Nominal Power (at 20°C)		110 mW
	Operate Power (at 20°C)		54 mW
	Operating Temperature		–40°C to +90°C (no frost)
Time Value	Operate (at nominal voltage)		Maximum 10 ms
	Release (at nominal voltage)		Maximum 5 ms
Life	Mechanical		2 x 10^7 operations minimum
	Electrical		1 × 10^5 operations minimum (at 3A 250VAC, 30VDC resistive) 5 × 10^4 operations minimum (at 5 A 250 VAC, 30 VDC resistive) (switching frequency 20 times/minute)
Other	Vibration Resistance	Misoperation	10 to 55 Hz (double amplitude of 1.5 mm)
		Endurance	10 to 55 Hz (double amplitude of 1.5 mm)
	Shock Resistance	Misoperation	100 m/s^2 (11 $^{\pm 1}$ ms)
		Endurance	1,000 m/s^2 (6 $^{\pm 1}$ ms)
	Weight		Approximately 2.5 g

*1 Minimum switching loads mentioned above are reference values. Please perform the confirmation test with the actual load before production since reference values may vary according to switching frequencies, environmental conditions and expected reliability levels.

■ INSULATION

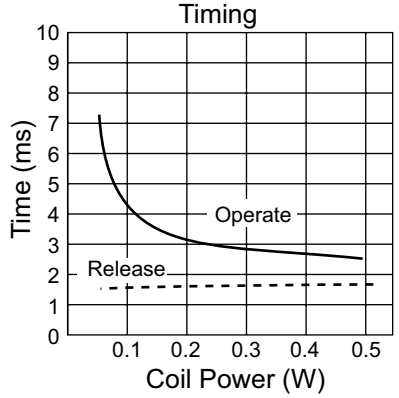
Item		FTR-MY	Note
Resistance (initial)		Minimum 1,000 MΩ	at 500 VDC
Dielectric Strength	open contacts	750 VAC 1 min.	
	coil and contacts	3,000 VAC 1 min.	
Surge Voltage		5,080 V	1.2 x 50μs standard wave

■ SAFETY STANDARDS

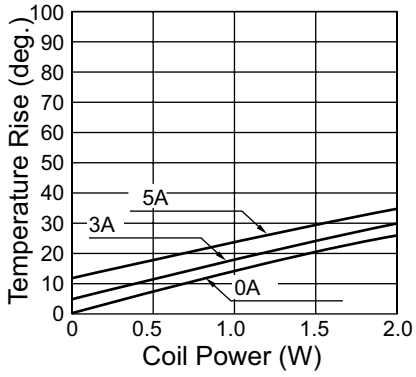
Type	Compliance	Contact rating
UL	UL 508, UL 1604 E63614, E225300	Flammability: UL 94-V0 (plastics) 5A, 277 VAC (resistive) 5A, 30 VDC (resistive) 1/10 HP, 277VAC /125VAC Pilot duty: D300, C300, R300
CSA	C22.2 No. 14 LR 40304	

■ REFERENCE DATA

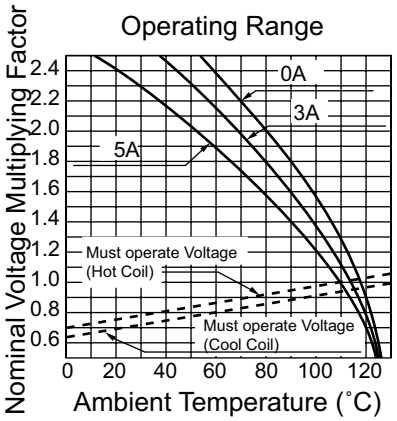
Timing



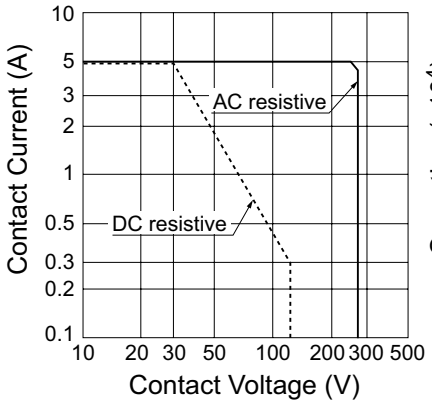
Coil Temperature Rise



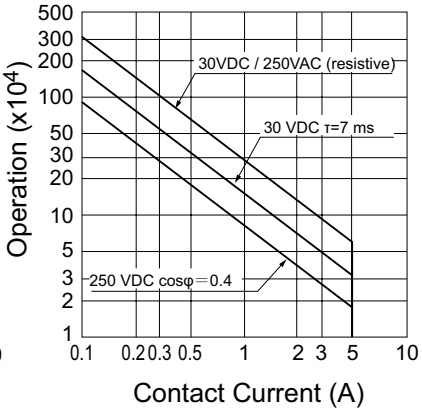
Operating Range



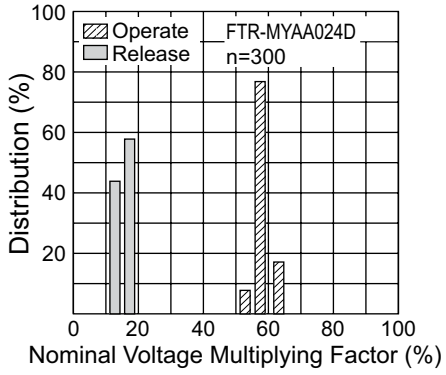
Maximum Switching Power



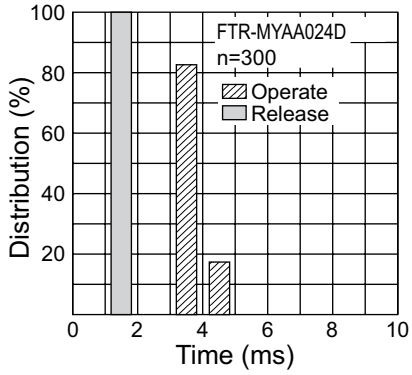
Life Curves



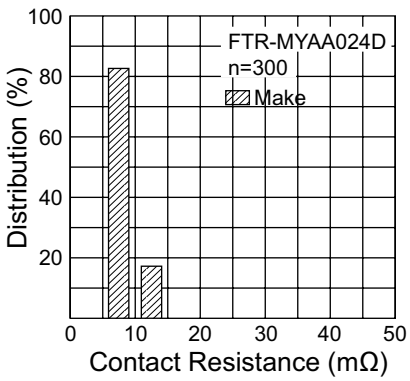
Distribution of Operate & Release Voltage



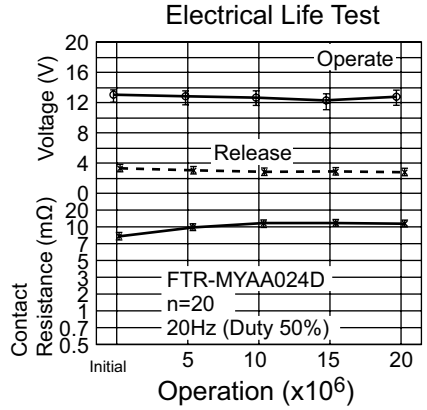
Distribution of Operate & Release Time



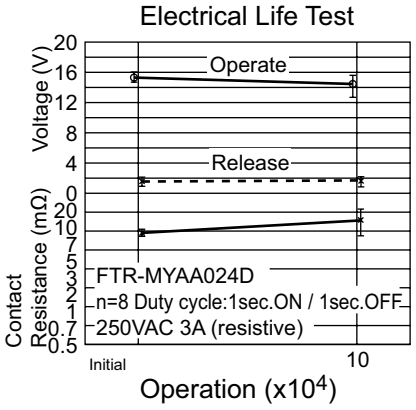
Distribution of Contact Resistance



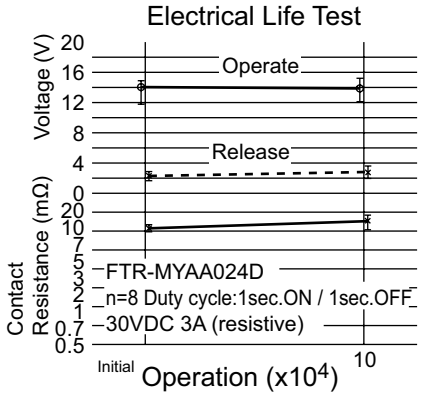
Electrical Life Test



Electrical Life Test

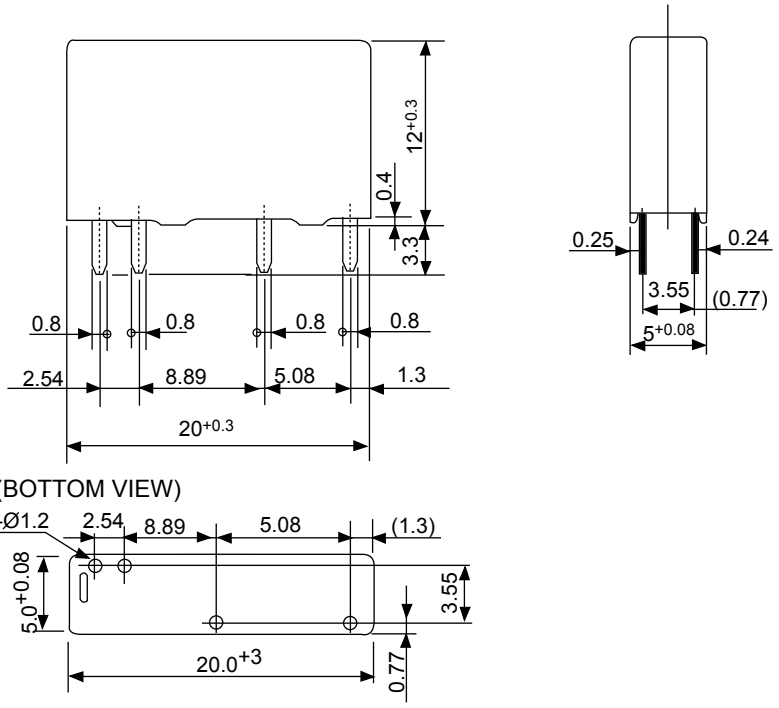


Electrical Life Test



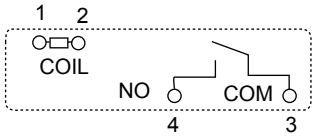
■ DIMENSIONS

● Dimensions



(BOTTOM VIEW)

● Wiring Diagram
(BOTTOM VIEW)



Unit: mm

RoHS Compliance and Lead Free Relay Information

1. General Information

- Relays produced after the specific date code that is indicated on each data sheet are lead-free now. All of our signal and power relays are lead-free. Please refer to Lead-Free Status Info. (http://www.fujitsu.com/us/downloads/MICRO/fcai/relays/lead-free-letter.pdf)
- Lead free solder paste currently used in relays is Sn-3.0Ag-0.5Cu.
- All signal and power relays also comply with RoHS. Please refer to individual data sheets. Relays that are RoHS compliant do not contain the 5 hazardous materials that are restricted by RoHS directive (lead, mercury, chromium IV, PBB, PBDE).
- It has been verified that using lead-free relays in leaded assembly process will not cause any problems (compatible).
- “LF” is marked on each outer and inner carton. (No marking on individual relays).
- To avoid leaded relays (for lead-free sample, etc.) please consult with area sales office.
- We will ship leaded relays as long as the leaded relay inventory exists.

Note: Cadmium was exempted from RoHS on October 21, 2005. (Amendment to Directive 2002/95/EC)

2. Recommended Lead Free Solder Profile

- Recommended solder paste Sn-3.0Ag-0.5Cu.

Reflow Solder condtion

Flow Solder condtion:

Pre-heating:	maximum 120˚C
Soldering:	dip within 5 sec. at 260˚C soler bath

Solder by Soldering Iron:

Soldering Iron Temperature:	maximum 360˚C
Duration:	maximum 3 sec.

We highly recommend that you confirm your actual solder conditions

3. Moisture Sensitivity

- Moisture Sensitivity Level standard is not applicable to electromechanical realys.

4. Tin Whisker

- Dipped SnAgCu solder is known as low risk tin whisker. No considerable length whisker was found by our in house test.

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Поставка электронных компонентов

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- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
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