FUJITSU THE POSSIBILITIES ARE INFINITE

POWER RELAY

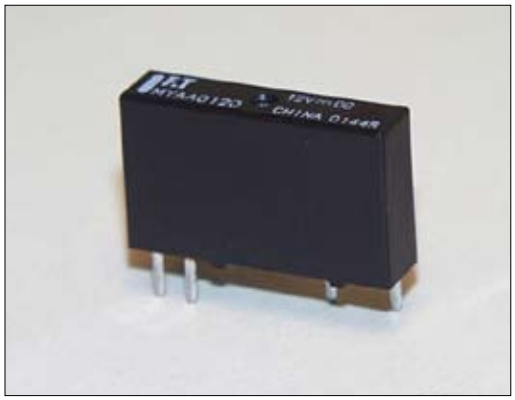
1 POLE - 5A SLIM POWER RELAY

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

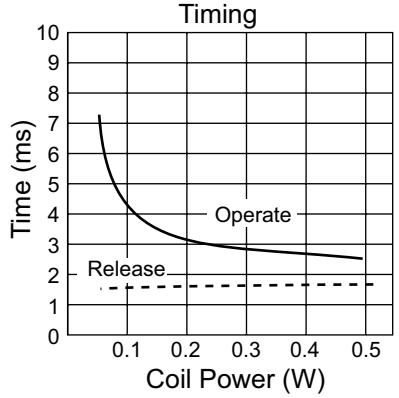
Item		FTR-MY	Note
Resistance (initial)		Minimum 1,000 MΩ	at 500 VDC
Dielectric Strength	open contacts	750 VAC 1 min.	
	coil and contacts	3,000 VAC 1 min.	
Surge Voltage		5,080 V	1.2 x 50μs standard wave

■ SAFETY STANDARDS

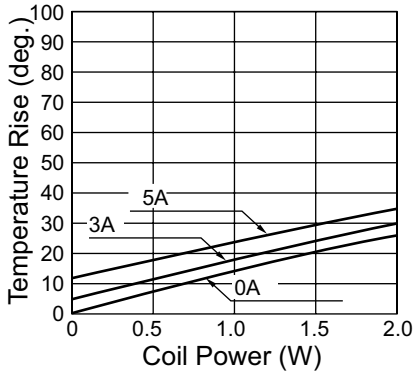
Type	Compliance	Contact rating
UL	UL 508, UL 1604 E63614, E225300	Flammability: UL 94-V0 (plastics) 5A, 277 VAC (resistive) 5A, 30 VDC (resistive) 1/10 HP, 277VAC /125VAC Pilot duty: D300, C300, R300
CSA	C22.2 No. 14 LR 40304	

■ REFERENCE DATA

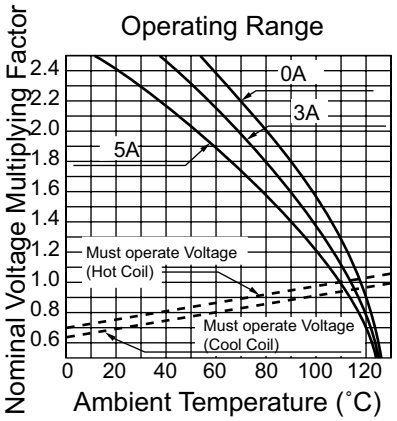
Timing



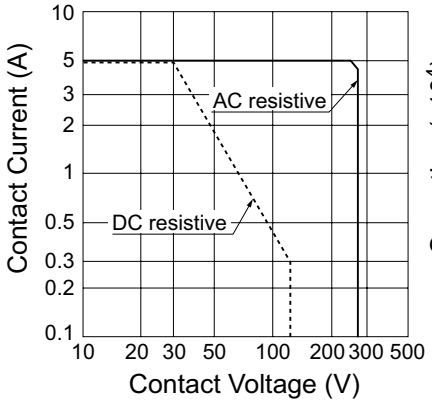
Coil Temperature Rise



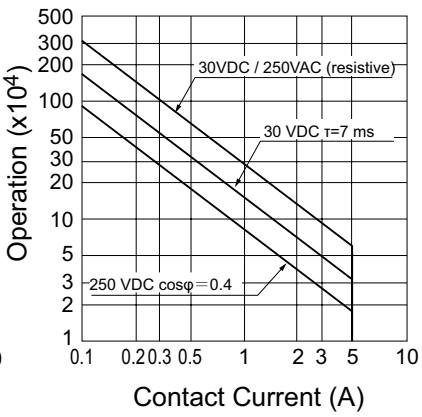
Operating Range



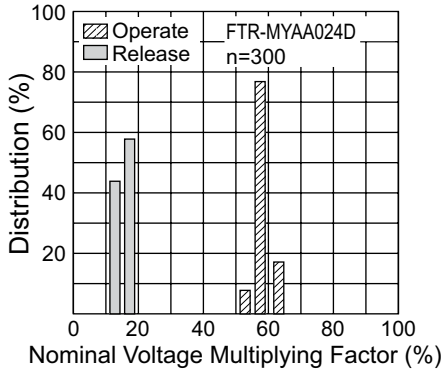
Maximum Switching Power



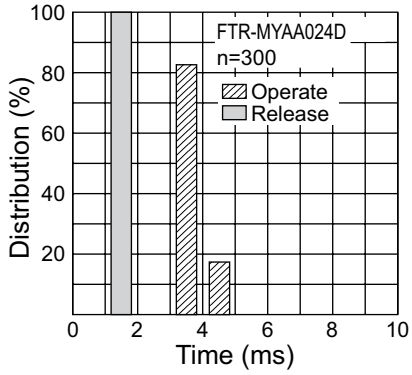
Life Curves



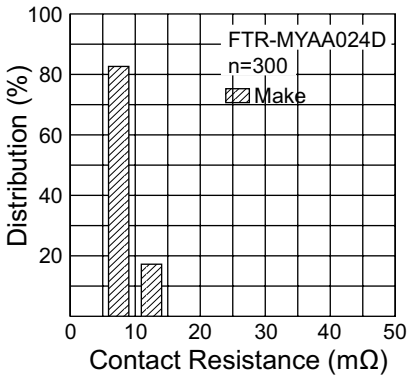
Distribution of Operate & Release Voltage



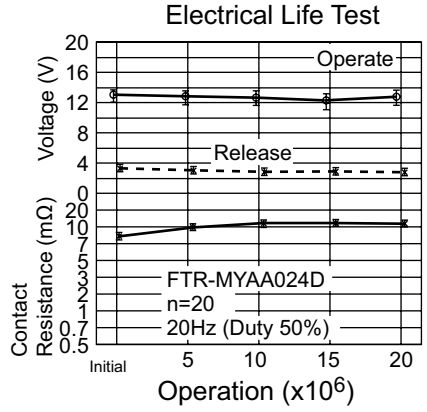
Distribution of Operate & Release Time



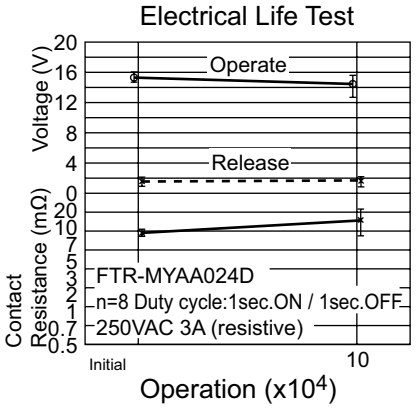
Distribution of Contact Resistance



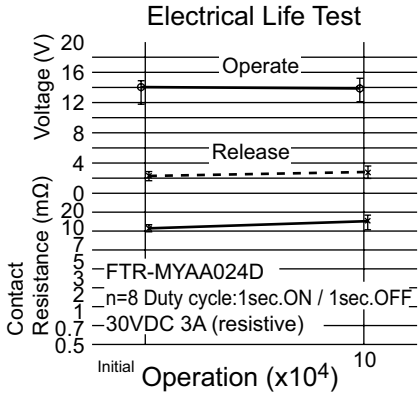
Electrical Life Test



Electrical Life Test

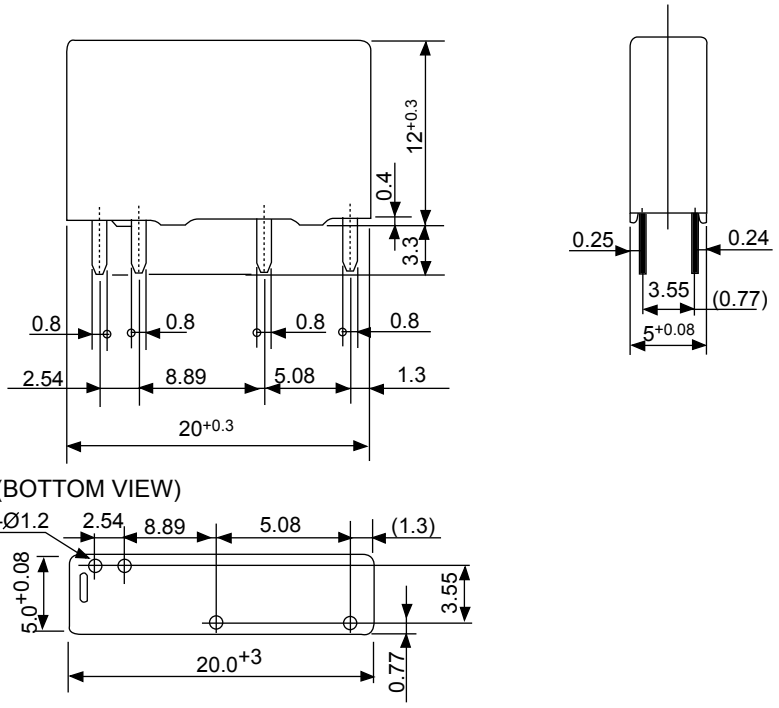


Electrical Life Test



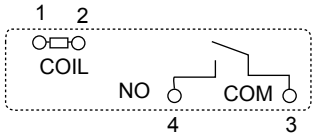
■ DIMENSIONS

● 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.

Fujitsu Components International Headquarter Offices

Japan
Fujitsu Component Limited
Gotanda-Chuo Building
3-5, Higashigotanda 2-chome, Shinagawa-ku
Tokyo 141 8630, Japan
Tel: (81-3) 5449-7010
Fax: (81-3) 5449-2626
Email: promothq@fcl.fujitsu.com
Web: www.fcl.fujitsu.com

North and South America
Fujitsu Components America, Inc.
250 E. Caribbean Drive
Sunnyvale, CA 94089 U.S.A.
Tel: (1-408) 745-4900
Fax: (1-408) 745-4970
Email: components@us.fujitsu.com
Web: http://us.fujitsu.com/components/

Europe
Fujitsu Components Europe B.V.
Diamantlaan 25
2132 WV Hoofddorp
Netherlands
Tel: (31-23) 5560910
Fax: (31-23) 5560950
Email: info@fceu.fujitsu.com
Web: emea.fujitsu.com/components/

Asia Pacific
Fujitsu Components Asia Ltd.
102E Pasir Panjang Road
#01-01 Citilink Warehouse Complex
Singapore 118529
Tel: (65) 6375-8560
Fax: (65) 6273-3021
Email: fcal@fcal.fujitsu.com
Web: http://www.fujitsu.com/sg/services/micro/components/

©2007 Fujitsu Components America, Inc. All rights reserved. All trademarks or registered trademarks are the property of their respective owners.

Fujitsu Components America or its affiliates do not warrant that the content of datasheet is error free. In a continuing effort to improve our products Fujitsu Components America, Inc. or its affiliates reserve the right to change specifications/datasheets without prior notice.
Rev. November 30, 2007.

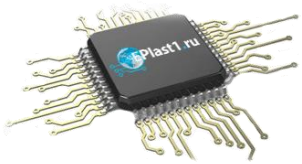
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)
Факс: 8 (812) 320-02-42
Электронная почта: org@eplast1.ru
Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.