

DISCONTINUED

BATTERY DRIVE, FTP-60D Series 2" HIGH SPEED THERMAL PRINTER

FTP-62DMCL101/111, Easy Loading Method

■ OVERVIEW

The easy loading FTP-60D MCL Series is ultra compact high speed, battery driven thermal printer, printing on 2-inch wide paper (58mm) where platens are removable. Our original platen removal mechanism improved paper loading and maintenance.

The FTP-60D MCL series can be used for a variety of applications, such as portable terminals, POS, banking terminals, and measurement and medical equipment.



FTP-62D series

■ HIGHLIGHTS

- **Easy loading type**
Our unique platen removal mechanism improved paper loading and maintenance
- **Ultra compact**
Height 19 mm, width 69.5 mm, depth 46 mm for the 2 inch model
- **High speed printing**
Print at 100mm/s (at 9.5VDC) maximum (FTP-62DMCL101)
Print at 75mm/s (at 7.2 VDC) maximum (FTP-62DMCL111)
- **High resolution printing**
8 dots/mm of resolution printing is possible
- **RoHS compliant**

■ PART NUMBERS

Item		Part number
Printers		FTP-62DMCL101 (FPC length 38mm) without platen open detect switch FTP-62DMCL111 (FPC length 65mm) without platen switch
LSI for driving		FTP-62DCUxxx
Interface boards	Serial	FTP-62DDSLxxx (RS 232C)
	USB	FTP-62DDSLxxx (V2.0)
	USB/RS-232C	FTP-62DDS001-R
Interface cables	Parallel	FTP-628Y202
	Serial	FTP-628Y302
	USB	FTP-628Y301
Power cable (head, motor, logic)		FTP-628Y402
Platen replacement		FTP-62DMP0221

■ SPECIFICATIONS

Item		Specifications
Part number		FTP-62DMCL101/111
Printing method		Thermal-line dot method
Dot structure		384 dots/line
Dot pitch (Horizontal)		0.125 mm (8 dots/mm)—Dot density
Dot pitch (Vertical)		0.125 mm (8 dots/mm)—Line feed pitch
Effective printing area		48 mm
Number of columns		ANK 32 columns/line (maximum 12x 24 dot font)
Paper width		58 mm ⁺⁰ ₋₁
Paper thickness		60 to 85 μm (some paper in this range may not be used because of paper characteristics)
Printing Speed	MCL101	Maximum 100mm/sec. (800 dot line/sec.) at 9.5V
	MCL111	Maximum 75mm/sec. (600 dot line/sec.) at 7.2V
Character types		Alphanumeric, katakana: 159 types International and special characters: 195 types JIS Kanji level 1, level 2, non-Kanji (supported only when Kanji CG is mounted): about 6800 types
Character, dimensions (H×W), number of columns		12 × 24 dots, (1.5 × 3.0mm), 32 columns: ANK 24 × 24 dots, (3.0 × 3.0mm), 16 columns: ANK, Kanji 8 × 16 dots, (1.0 × 2.0 mm), 48 columns: ANK 16 × 16 dots, (2.0 × 2.0 mm), 24 columns: ANK, Kanji

■ SPECIFICATIONS

Item			Specification	
			FTP-62DMCL101/111	
Interface			Conforms to RS232C / USB	
Operating Voltage	For print head	MCL101/111	4.2 VDC to 9.5 V, average current 0.87A (0.93),peak value Printing ratio: 12.5%, printing speed 75mm/sec. at 7.2 V	
	For motor	MCL101/111	4.2 to 9.5VDC, 1A maximum	
	For logic	MCL101/111	3.0 to 5.25VDC, 0.1 A maximum	
Dimensions	Printer mechanism		69.5 x 46 x 19mm (WxDxH)	
	Interface board		40 x 41mm	
Weight	Printer mechanism		Approximately 29 g	
	Interface board		TBA	
Head life			Pulse resistance: 100 million pulses/dot (under our standard conditions). Abrasion resistance: paper traveling distance 50km (print ratio: 25% or less)	
Operating environment	Operating temperature*		0°C to +50°C	
	Operating humidity		20 to 85% RH (no condensation)	
	Storage temperature		-20°C to +60°C (paper not included)	
	Storage humidity		5 to 95% RH (no condensation)	
Detection function	Head temperature detection		Detected by thermistor	
	Paper out/mark detection		Detected by photo-interrupter	
Recommended thermal sensitive paper			High sensitive paper:	TF60KS-E4 (Nippon Paper)
			Standard paper:	TK50KS-E (Nippon Paper) PD150R (Oji Paper) FTP-020P0701 (58mm)
			Medium life storage paper:	TK60KS-F1 (Nippon Paper) FTP-020P0704 (58mm) PD170R (Oji Paper) P220VBB-1 (Mitsubishi Paper)
			Long life storage paper:	PD160R-N (Oji Paper) AFP-235 (Mitsubishi Paper) TP50KJ-R (Nippon Paper) HA220AA (Nippon Paper)

*+5°C to +40°C printing density assurance range (-25 to 70°C capability)

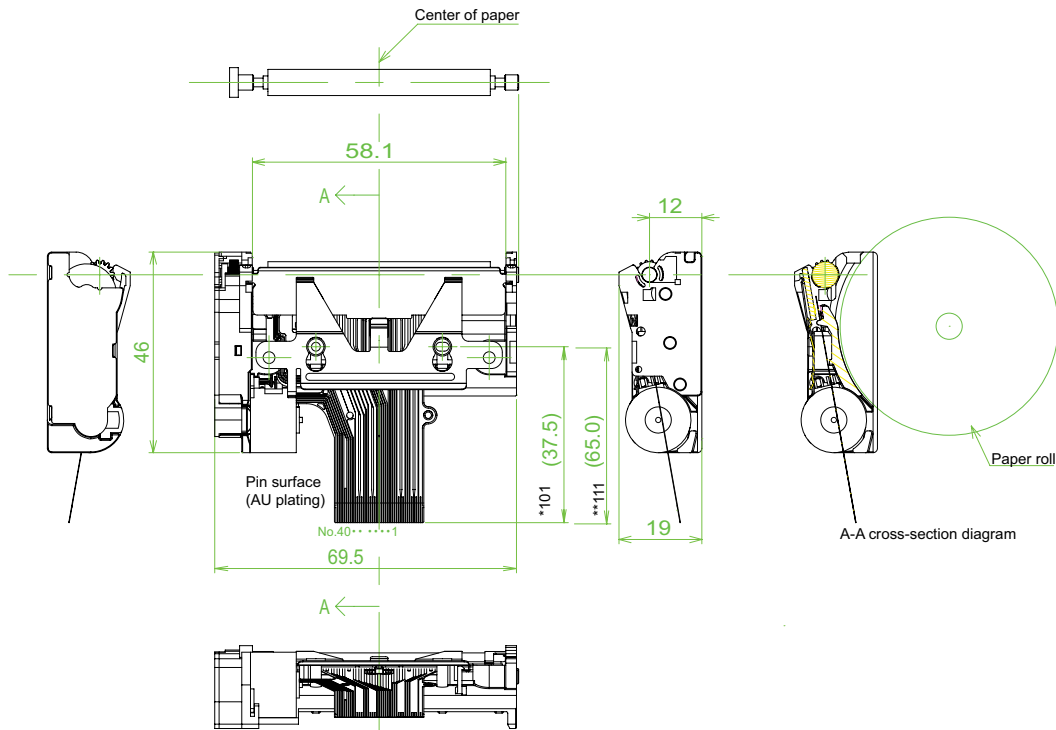
■ FUNCTION

Item	Item
1. Test print function	8. Mark detection function
2. Paper out detection	9. MCU operation abnormality detection
3. Paper near end detection	10. Power ON/OFF sequence protection
4. Thermal head temperature abnormality detection	11. Motor over-current protection
5. Blow-out fuse detection	12. Hardware timer
6. Head voltage abnormality detection	
7. Motor power saving function	

■ DIMENSIONS

1. Printer mechanism: 2- inch

FTP-62DMCL101*/111**



Unit: mm

Note: 1. Dimensions are nominal value (tolerance ± 0.5 unless otherwise specified).
2. Dimension listed in () is for reference

■ PRINTER CONNECTOR (FLEXIBLE PT BOARD) PIN ARRAYS

FTP-62DMCL101/111

Thermal head, control circuit side connector: 54104-4031 Molex or equivalent product

No.	Symbol	I/O	Signal Name
1	N.C.	-	No connection
2	N.C	-	
3	VH	I	Head drive power
4	VH	I	
5	VH	I	
6	VH	I	
7	DI	I	Data in
8	CLK	I	Clock
9	GND	-	Head ground
10	GND	-	
11	GND	-	
12	GND	-	
13	STB6	I	Strobe 6
14	STB5	I	Strobe 5
15	STB4	I	Strobe 4
16	Vdd	I	Logic power
17	TM	O	Thermistor
18	TM	O	
19	STB3	I	Strobe 3
20	STB2	I	Strobe 2
21	STB1	I	Strobe 1
23	GND	-	Head ground
24	GND	-	
25	GND	-	
26	/LAT	I	/ Data latch
27	DO	O	Data out
28	VH	I	Head drive power
29	VH	I	
30	VH	I	
31	VH	I	
32	N.C.	-	No connection
33	PHK	-	Cathode for photo interrupter
34	VSEN	I	Paper sensor power
35	PHE	O	Emitter for photo interruptor
36	N.C.	-	No connection
37	MT /A	I	Excitation signal A
38	MT /A	I	Excitation signal A
39	MT /B	I	Excitation signal B
40	MT /B	I	Excitation signal B

Do not plug or unplug the FPC when power is on.

Contact

Japan

FUJITSU COMPONENT LIMITED
Shinagawa Seaside Park Tower
12-4, Higashi-shinagawa 4-chome,
Tokyo 140 0002, Japan
Tel: (81-3) 3450-1682
Fax: (81-3) 3474-2385
Email: fcl-contact@cs.jp.fujitsu.com
Web: www.fujitsu.com/jp/group/fcl/en/

North and South America

FUJITSU COMPONENTS AMERICA, INC.
2290 North First Street, Suite 212
San Jose, CA 95131 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@sg.fujitsu.com
www.fujitsu.com/sg/products/devices/
components/

China

FUJITSU ELECTRONIC COMPONENTS
(SHANGHAI) CO., LTD.
Unit 4306, InterContinental Center
100 Yu Tong Road, Shanghai 200070, China
Tel: (86 21) 3253 0998 / Fax: (86 21) 3253 0997
Email: fcal@sg.fujitsu.com
www.fujitsu.com/sg/products/devices/
components/

Hong Kong

FUJITSU COMPONENTS HONG KONG Co., Ltd.
Room 06, 28/F, Greenfield Tower, Concordia
Plaza, No.1 Science Museum Road,
Tsim Sha Tsui East, Kowloon, Hong Kong
Tel: (852) 2881 8495 Fax: (852) 2894 9512
Email: fcal@sg.fujitsu.com
www.fujitsu.com/sg/products/devices/
components/

Korea

FUJITSU COMPONENTS KOREA, LTD.
Alpha Tower #403,
645 Sampyeong-dong,
Bundang-gu, Seongnam-si,
Gyeonggi-do, 13524 Korea
Tel: (82 31) 708-7108
Fax: (82 31) 709-7108
Email: fcal@sg.fujitsu.com
www.fujitsu.com/sg/products/
devices/components/

Copyright

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. Copyright ©2018 Fujitsu Components America, Inc. All rights reserved. Revised March 28, 2018.

Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:

moschip.ru

moschip.ru_4

moschip.ru_6

moschip.ru_9