

FUJITSU Component Thermal Printer FTP-63GMCL153/453 series

Fujitsu 3" high speed (up to 200mm/s) thermal printer mechanism with cutter option

Overview

The FTP-63GMCL series thermal printer driven by 24VDC provides high speed printing (up to 200mm/s) for 3-inch wide paper.

The series is suitable for a variety of applications, such as POS/ECR, kiosk terminals, ticket machines, label printers, banking machines, measuring devices, medical equipment, etc.



- High-speed printing
 - It can print up to 200mm/s (1600 dotlines/s) maximum by using Fujitsu Components' unique head drive control
- Rear paper insertion mechanism with lock type
 Fujitsu Components' unique platen release mechanism allows for a straight paper path and easy head maintenance
- Auto Cutter
 Optional ultra-low profile auto cutter (full/partial cut) comes mounted from the factory.
- Multi-feature diecast frame
 The rugged die-cast frame provides excellent ESD performance, is shock/
- Compact size Depth: 20.4mm, width: 96.2mm, height: 36.3mm (FTP-63GMCL153) Depth: 32.4mm, width: 100.5mm, height: 45.6mm (FTP-63GMCL453)

vibration resistant and the heat-sink allows for continuous printing

- High resolution8 dots/mm head provides clear print
- Paper width 80mm
- RoHS compliant
- UL recognized. File number E171434



FTP-63GMCL153



FTP-63GMCL453

Part numbers

Item		Part Numbers	
Printer mechanism	Back insertion	FTP-63GMCL153	
Mechanism with cutter	Rear insertion	FTP-63GMCL453	
LSI for driving		Under development	
Interface board	Serial (RS232C/USB)	FTP-62GDSL001#01 (Japanese font)	
	Serial (RS232C/USB)	FTP-62GDSL001#02 (Traditional Chinese font)	
Interface cable	Serial	FTP-62GY302	
	USB	FTP-62GY301	
Power supply cable	Logic, head, motor	FTP-62GY601	

Specifications

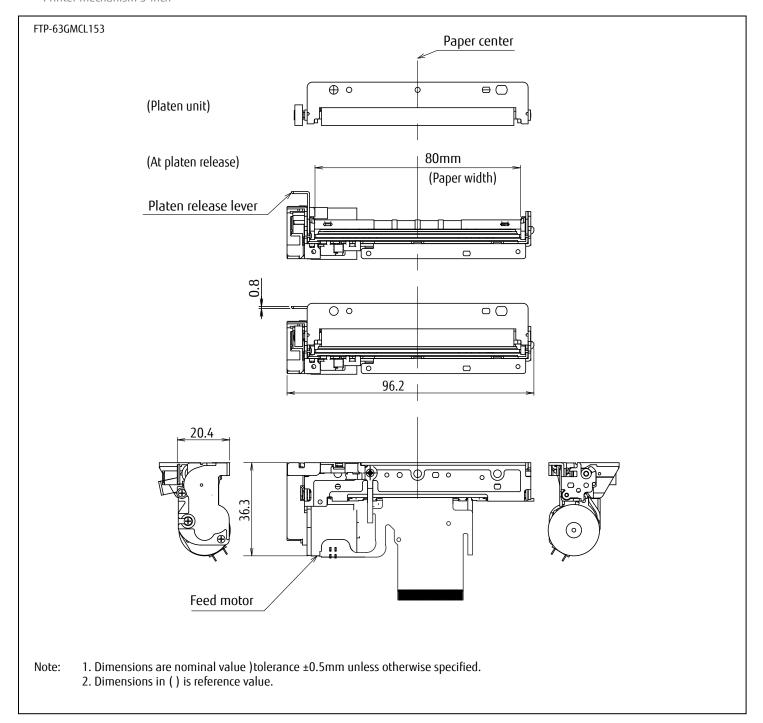
Item		Specifications		
Part number		FTP-63GMCL153	FTP-63GMCL453	
Printing method		Thermal sensitive line dot method		
Dot structure		576 dots/lines		
Dot pitch (horizontal)		0.125mm (8 dots/mm) - Dot density		
Dot pitch (vertical)		0.125mm (8 dots/mm) - Line feed pitch		
Effective printing area		72mm		
Number of columns		ANK 48 columns/line (12 x 24 x dot font), OCD 24 columns (24 x 40)		
Paper width		80mm +0/-1		
Paper thickness		60-150µm*1	60-100µm*¹	
Cutting type			Full or partial	
Printing speed		200mm/s (1600 dot lines/s)		
Character types	Alphanumeric KANA International and special OCRI OCRIII OCRIV Extended numeric JIS KANJI level 1, 2, non-Kanji Traditional Chinese	159 types 195 types 103 types 23 types 103 types 12 types JIS KANJI: approx. 6800 13, 503		
Character dimensions (W x H), number of characters		8 x 16 dots, 72 columns, ANK 12 x 24 dots, 48 columns, ANK 16 x 16 dots, 36 columns, ANK 24 x 24 dots, 24 columns, ANK	24 x 40 dots, 24 columns, OCRI 24 x 48 dots, 24 columns, OCRII 36 x 60 dots, 16 columns, OCRIV 24 x 48 dots, 24 columns, extended numeric	

^{*1:} there may be exceptions

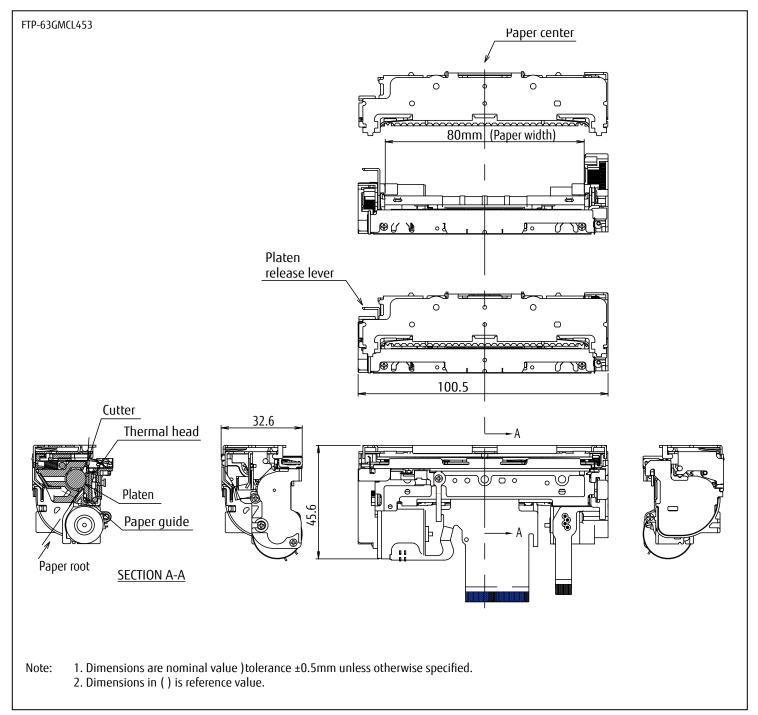
Item		Specifications	
Part number		FTP-63GMCL153	FTP-63GMCL453
Power	For head	24VDC ±10% 3A (24V, 1500 Ω, +25°C, concurrent applied dot number: 192 dots)	
	For printer motor	24VDC ±10% 0.6A maximum	
	For logic	3.3 or 5 VDC±5% 0.1A maximum	
Dimensions	Printer mechanism	96.2 x 20.4 x 36.3mm	
(WxDxH)	Printer mechanism w/ cutter		100.5 x 32.6 x 45.6mm
	Interface board (DCL/DSL)	70 x 35mm	
Weight	Printer mechanism	79g	
	Printer mechanism w/ cutter		155g
	Interface board (DCL/DSL)	15g	
Expected life	Head	Pulse durability: 100 million pulse/dot (using Fujitsu Components' standard driving method) Wear resistance: 100km (at 12.5% print ratio)	
	Cutter		500,000 cuts min.
Environmental	Operating temperature	+5°C to +40°C (guarantee)	
conditions	Operating humidity	20 to 85% RH (no condensation)	
	Storage temperature	-20°C to +60°C (excluding paper)	
	Storage humidity	5 to 95% RH (no condensation)	
Detection functions	Head temperature	By thermistor	
	Paper out/Mark detect	By photointerrupter	
	Head release	By slide switch	
Recommended	High sensitive paper	TF50KS-E45 (Nippon paper)	
thermal sensitive paper	Standard paper	TF-60KS-E (Nippon paper) PD150R (Oji paper)	
	Medium term paper	TF-60KS-F1 (Nippon paper) PD170R (Oji paper) P220VBB-1 (Mitsubishi paper)	
	Long term paper	PD160R-N (Oji paper)	

Dimensions

Printer mechanism 3-inch



• Printer mechanism / cutter 3-inch



Connector pin assignments of printer mechanism (FPC) Recommended connector of head FPC: 54104-5031 (Molex) or equivalent

No	Signal	Content	1/0
1	VSEN	Paper sensor power	IN
2	PHK	Cathode for photo interrupter	OUT
3	PHE	Emitter for photo interrupter	OUT
4	N.C.	Not connected	-
5	VH	Head drive power	IN
6	VH	Head drive power	IN
7	VH	Head drive power	IN
8	VH	Head drive power	IN
9	DI	Data in	IN
10	/STB3	/Strobe3	IN
11	/STB4	/Strobe4	IN
12	VDD	Logic power	IN
13	GND	Head ground	-
14	GND	Head ground	-
15	GND	Head ground	-
16	GND	Head ground	-
17	GND	Head ground	-
18	GND	Head ground	-
19	GND	Head ground	-
20	GND	Head ground	-
21	TM	Thermistor	OUT
22	/STB1	/Strobe1	IN
23	/STB2	/Strobe2	IN
24	/LAT	/Data latch	IN
25	CLK	Clock	IN
26	VH	Head drive power	IN
27	VH	Head drive power	IN
28	VH	Head drive power	IN
29	VH	Head drive power	IN
30	N.C.	Not connected	-
31	SW	Platen switch release	OUT
32	SW	Platen switch release	OUT
33	MT_/A	Excitation signal /A	SINK/SOURCE
34	MT_/A	Excitation signal /A	SINK/SOURCE
35	MT_A	Excitation signal A	SINK/SOURCE
36	MT_A	Excitation signal A	SINK/SOURCE
37	MT_/B	Excitation signal /B	SINK/SOURCE
38	MT_/B	Excitation signal /B	SINK/SOURCE
39	MT_B	Excitation signal B	SINK/SOURCE
40	MT_B	Excitation signal B	SINK/SOURCE

Connector pin assignments of cutter (FPC) Recommended connector of cutter motor FPC: 52745-1297 (Molex) or equivalent

No	Signal	Content	1/0
1	MT_B	Excitation signal B	SINK/SOURCE
2	MT_B	Excitation signal B	SINK/SOURCE
3	MT_/B	Excitation signal /B	SINK/SOURCE
4	MT_/B	Excitation signal /B	SINK/SOURCE
5	MT_A	Excitation signal A	SINK/SOURCE
6	MT_A	Excitation signal A	SINK/SOURCE
7	MT_/A	Excitation signal /A	SINK/SOURCE
8	MT_/A	Excitation signal /A	SINK/SOURCE
9	N.C.	Not connected	-
10	VSEN	Paper sensor power	IN
11	PHE	Emitter for photo interrupter	OUT
12	PHK	Cathode for photo interrupter	OUT

Contact

Japan

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, The Netherlands Tel: (31-23) 5560910 Fax: (31-23) 5560950 Email: info@fceu.fujitsu.com Web: www.fujitsu.com/uk/products/devices/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/

Когеа

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/

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