

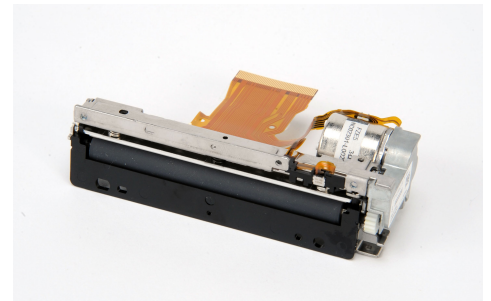
FUJITSU Component Thermal Printer FTP-63HMCL153 series

Fujitsu 3" high speed thermal printer mechanism

Overview

The compact, low voltage FTP-63HMCL series provides an ultra low profile design and high speed printing (100mm/s).

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.



FTP-63HMCL153

Features

- **High-speed printing**
It can print at 100mm/s (800 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
- **Multi-feature diecast frame**
The rugged die-cast frame provides excellent ESD performance, is shock/vibration resistant and the heat-sink allows for continuous printing
- **Compact size**
Depth: 20.4mm, width: 96.2mm, height: 36.3mm
- **High resolution**
8 dots/mm head provides clear print out
- UL recognized, file # E171434
- RoHS compliant

■ Part numbers

Item		Part Number
Printer mechanism	Back insertion	FTP-63HMCL153 (80mm paper width)
Interface board		FTP-62HDSL101#01
Interface cable	USB	FTP-629Y301#01
	RS-232C	FTP-629Y302
Power supply cable		FTP-629Y601

■ Specifications

Item	Specifications	
Part number	FTP-63HMCL153	
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 36 columns/line	
Paper width	80mm +0/-1	
Paper thickness	60-150 μ m*1	
Cutting type	---	
Printing speed	100mm/s (800 dot lines/s)*2	
Character types	Alphanumeric KANA: 159 types International and special: 195 types OCRI: 103 types CCRIII: 23 types OCRIV: 103 types Extended numeric: 12 types JIS KANJI level 1,2, non-Kanji: JIS KANJI: approx. 6,800 Traditional Chinese: 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
Power	For head	4.2 to 9.5VDC 2.4A (Head voltage 7.2VDC, 176 Ω , +25°C, concurrent applied dot number: 64 dots)
	For printer motor	4.2 to 9.5VDC 1.5A (using Fujitsu Components' standard constant current circuit drive)
	For logic	3.3 \pm 10% or 5.5 \pm 10%, 0.1A (max.)
Dimensions (WxDxH)	Printer mechanism	96.2 x 20.4 x 36.3mm
Weight	Printer mechanism	79g
Expected life	Head	Pulse durability: 100 million pulse/dot (using Fujitsu Components' standard driving method)
		Wear resistance: 100km (at 12.5% print ratio)
Environmental conditions	Operating temperature	+5°C to +40°C guarantee
	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 thermal sensitive paper	High sensitive paper	TF50KS-E4 (Nippon paper)
	Standard paper	PD150R (Oji paper)
	Long term paper	PD160R(Oji paper), TF50KJ-R (Nippon paper), HA220AA (Mitsubishi paper)*3

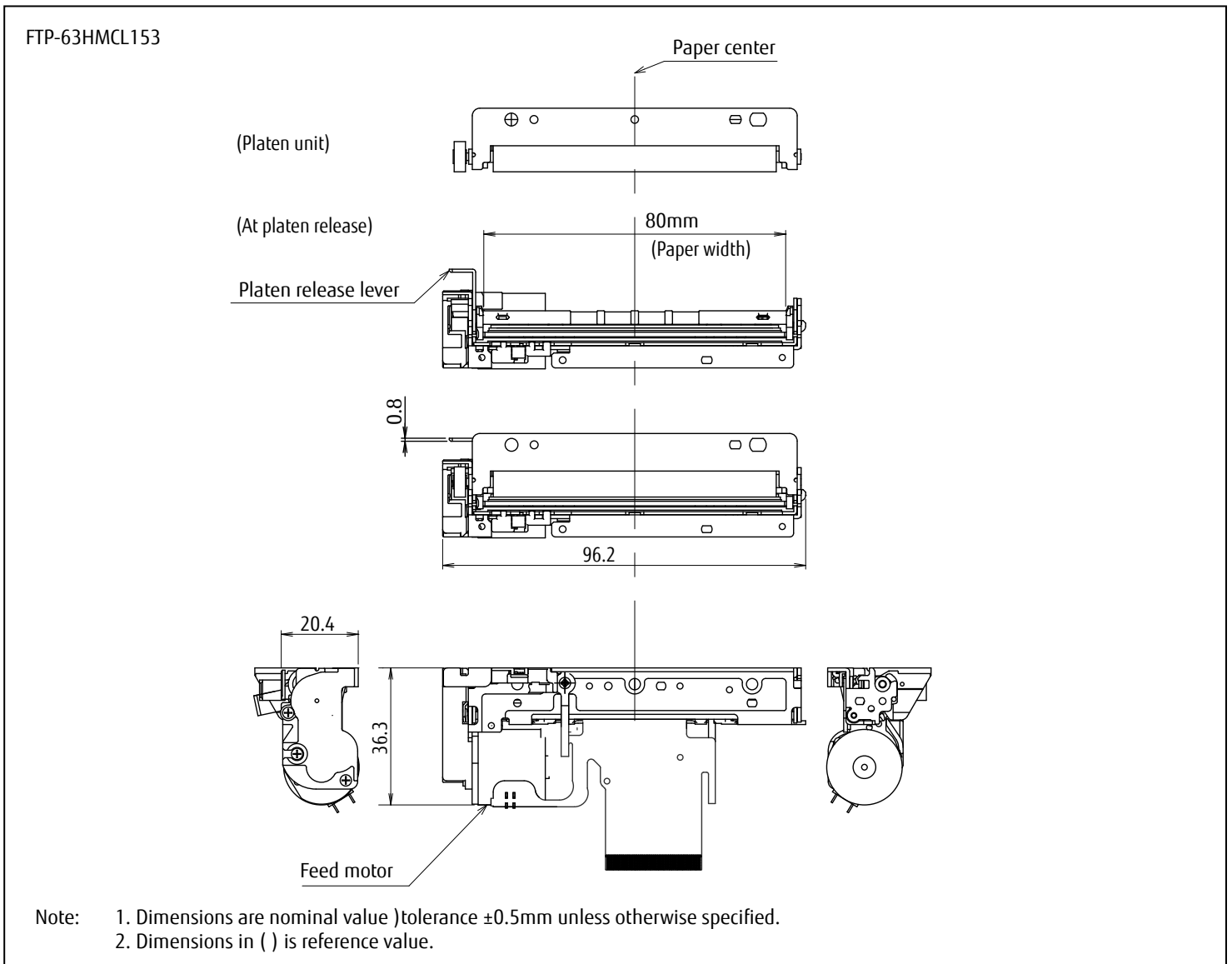
*1: there may be exceptions

*2: Head voltage 7.6V, ambient temperature 25°C, concurrent applied dots 128 dots maximum, high speed mode, motor drive current 600mA/phase, use standard paper

*3: Maximum printing speed is 50mm/s when using HA220AA

■ Dimensions

- Printer mechanism: 3-inch



■ Connector pin assignments of printer mechanism (FPC)

No	Signal	Content	I/O
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	N.C.	Not connected	-
6	VH	Head drive power	IN
7	VH	Head drive power	IN
8	VH	Head drive power	IN
9	VH	Head drive power	IN
10	DI	Data in	IN
11	CLK	Clock	IN
12	GND	Head ground	-
13	GND	Head ground	-
14	GND	Head ground	-
15	GND	Head ground	-
16	/STB6	/Strobe6	IN
17	/STB5	/Strobe5	IN
18	/STB4	/Strobe4	IN
19	VDD	Logic power	IN
20	TM	Thermistor	OUT
21	TM	Thermistor	OUT
22	/STB3	/Strobe3	IN
23	/STB2	/Strobe2	IN
24	/STB1	/Strobe1	IN
25	GND	Head ground	-
26	GND	Head ground	-
27	GND	Head ground	-
28	GND	Head ground	-
29	/LAT	/Data latch	IN
30	DO	Data out	OUT
31	VH	Head drive power	IN
32	VH	Head drive power	IN
33	VH	Head drive power	IN
34	VH	Head drive power	IN
35	N.C.	Not connected	-
36	N.C.	Not connected	-
37	SW	Platen release switch	OUT
38	SW	Platen release switch	OUT
39	FG	Flame ground	-
40	MTM	Motor thermistor	OUT

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/

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/

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/

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/

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/

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/

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/

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 November 6, 2018.
