FUJITSU

24 V DRIVE, FTP-607 SERIES

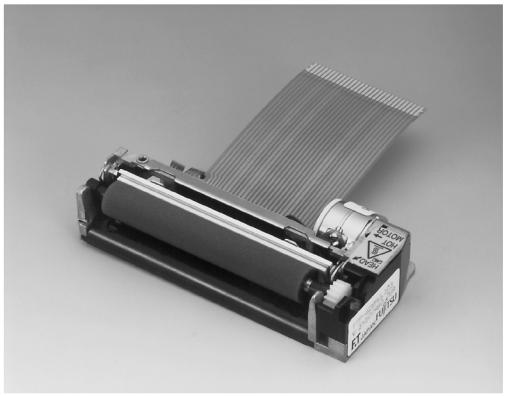
HIGH SPEED THERMAL PRINTER

2-INCH TYPE EASY LOAD MECHANISM

FTP-627MCL101/113 *DISCONTINUED*

FTP-627MCL103 - *Not for New Design*

■ OVERVIEW



The FTP-607MCL Series thermal printer (driven by 24VDC) provides ultra-high speed printing (100mm/s) for 2-inch and 3-inch wide paper. Our original platen removal mechanism allows easy paper loading and maintenance.

The FTP-607 MCL series can be used for a variety of applications, such as POS/ECR, Kiosk terminals, banking terminals, and measurement and medical equipment.

■ HIGHLIGHTS

- **Compact size**
  Height 15.5 mm, width 70.4 mm, depth 33.0 mm for the 2 inch model. The 3-inch product has a width of 92.4mm.

- **High speed printing**
  It can print at 100 mm/s (800 dotlines/s) maximum by using Fujitsu's head drive control.

- **Easy loading mechanism (ELM) type**
  Our detachable platen removal mechanism improved paper loading and maintenance.

- **Multi-featuring diecast fame**
  By application of multi-featuring diecast frame, continous print by function of heat-sink, high ESD stand by function of earth frame and shock/vibration stand by function of solid frame are valid.

- **High resolution printing**
  8 dots/mm of resolution printing is possible.

- **RoHS compliant**

■ PART NUMBERS

Name		Part Number
Printer Mechanism		FTP-627MCL101 (without platen detect switch) FTP-627MCL103 (with platen detect switch) FTP-627MCL113 (with platen bracket and detect switch)
LSI		FTP-627CU201
Interface Board	parallel	FTP-627DCL218
	serial	FTP-627DSL238
Interface Cable (board to mechanism)	Centronics	FTP-628Y202
	RS-232C	FTP-628Y302
Power supply cable	logic	FTP-629Y401
	head, motor	FTP-629Y601

■ SPECIFICATIONS

Item		Specifications	
Part number		FTP-627MCL101/103	FTP-627MCL113
Printing method		Thermal-sensitive 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 (max.12x 24 dot font)	
Paper width		58 mm $^{+0}_{-1}$	
Paper thickness		60 to 100 μ m (some paper in this range may not be used because of paper characteristics)	
Printing Speed		Maximum 100mm/sec. (800 dot line/sec.)	
Character types		Alphanumeric, katakana: 159 types International and special characters: 195 types JIS Kanji (supported when Kanji CG is mounted): about 6800 types	
Character, dimensions (H×W), number of columns	(1.5 × 3.0mm) (3.0 × 3.0mm) (1.0 × 2.0 mm) (2.0 × 2.0 mm)	12 × 24 dots, 32 columns: ANK 24 × 24 dots, 16 columns: ANK, Kanji 8 × 16 dots, 48 columns: ANK 16 × 16 dots, 24 columns: ANK, Kanji	

■ SPECIFICATIONS

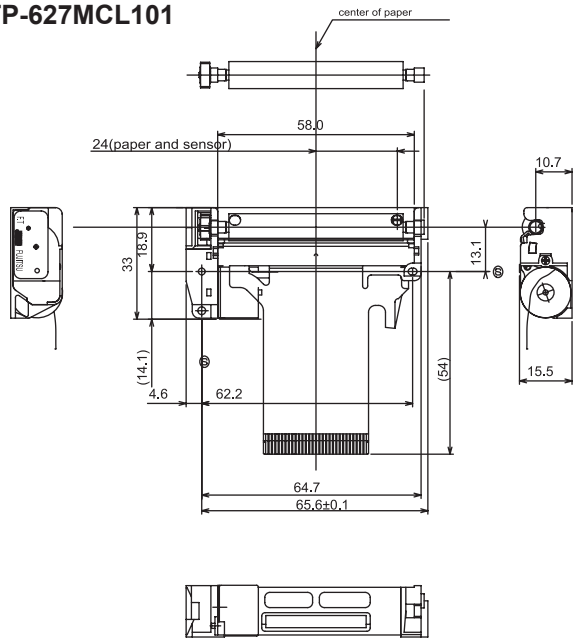
Item		Specification	
		FTP-627MCL101/103	FTP-627MCL113
Interface		Conforms to RS232C / Centronics	
Operating Voltage	For print head	24 VDC ±5%, 1.0 A average (1.5A peak) 24V, 25% printing ratio	
	For motor	24 VDC, 1 A maximum	
	For logic	3.3 to 5.25 VDC ± 5%, 0.1 A maximum	
Dimensions	Printer mechanism	72.4 x 33.0 x 15.5 mm (WxDxH)	75.0 x 33.4 x 15.5 mm (WxDxH)
	Interface board	70 x 60 x 11.6 mm (WxDxH)	
Weight	Mechanism	Approximately 42g	Approximately 54g
	Interface board	Approximately 55g	
Life	Head	Pulse resistance: 50 million pulses/dot (under our standard conditions). Abrasion resistance: paper traveling distance 50km (print ratio: 25% or less)	
	Platen open	5,000 times	
Operating environment	Operating temperature	0˚ C to +50˚ C*1	
	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	
	Platen release detection	Detected by slide switch (103/383 only)	
Recommended thermal sensitive paper		High Sensitive Paper	TF50KS-E4 (Nippon Paper)
		Standard paper:	TF60KS-E(Nippon Paper), FTP-020PU001 (58mm), PD105R (Oji Paper), FTP-020P0701 (58mm)
		Medium Life Paper	TF60KS-F1, FTP-020P0102 (58mm), PD170R (Oji Paper), P220VBB-1 Mitsubishi Paper)
		Long Life Paper	PD160R-N (Oji Paper), AFB-235 (Mitsubishi Paper), TP50KJ-R (Nippon Paper), HA220AA (Nippon Paper)

*1: printing density assurance range, operation is possible at -25˚C to +70˚C

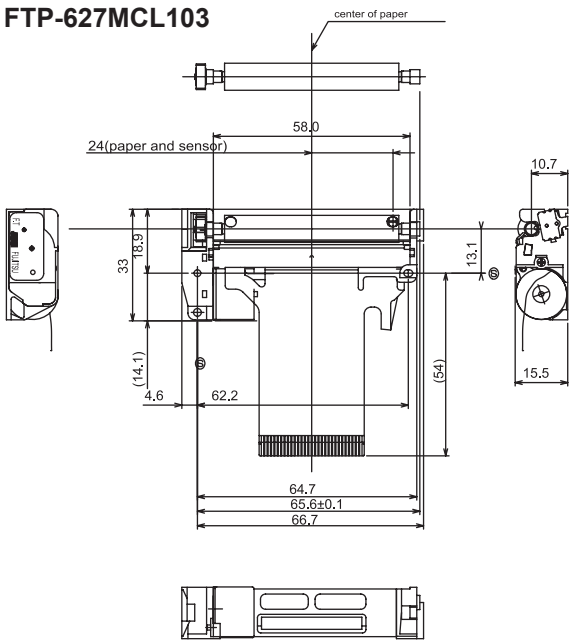
■ DIMENSIONS

1. Printer mechanism

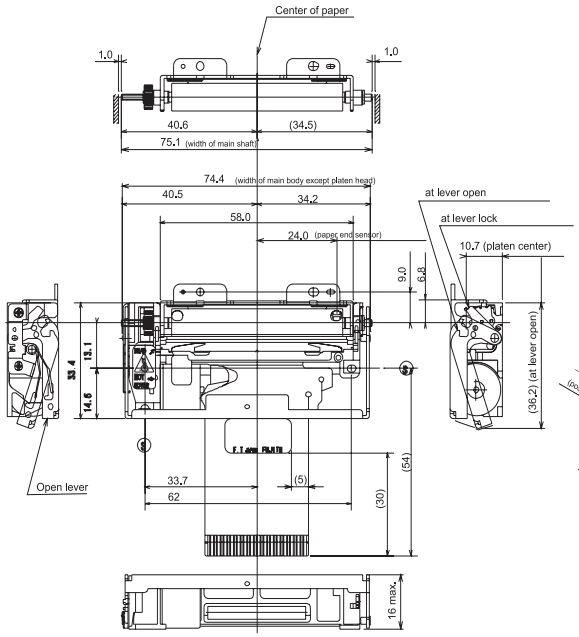
FTP-627MCL101

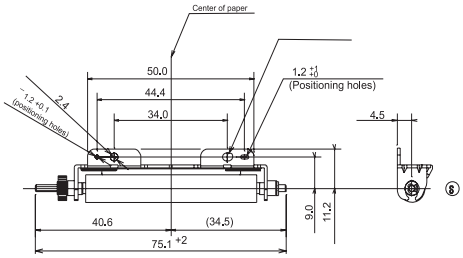


FTP-627MCL103



FTP-627MCL113





Unit: mm

■ CONNECTOR PIN ASSIGNMENT OF MECHANISM (FPC)

1. Thermal Head

Part number : 52610-3071 Molex or equivalent

FTP-627MCL101/103 PIN ASSIGNMENT

No	Signal	I/O	Contents
1	PHK	—	Photointerrupter (Cathode)
2	VSEN	—	Ground power supply for paper sensor
3	PHE	O	Photointerrupter (Emittor)
4	SW	—	Platen open switch
5	SW	O	Platen open switch
6	VH	I	Power supply for thermal head
7	VH	I	
8	VH	I	
9	DI	I	Print data in
10	$\overline{STB3}$	I	Strobe 3
11	VDD	I	Power for logic
12	TH	O	Thermistor
13	GND	—	Ground power supply for thermal head
14	GND	—	
15	GND	—	
16	GND	—	
17	GND	—	
18	GND	—	
19	$\overline{STB1}$	I	Strobe 1
20	$\overline{STB2}$	I	Strobe 2
21	$\overline{LAT}$	I	Print data latch
22	CLK	I	Clock
23	NC	—	Not connected
24	VH	I	Power supply for thermal head
25	VH	I	
26	VH	I	
27	MT A	I	Stepping motor excitation signal
28	MT $\overline{A}$	I	
29	MT B	I	
30	MT $\overline{B}$	I	

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