LNP775224F

Panel Display Units

Full Color Type

■ Structure

- Illumination color: Red, Green, Blue Full-color display
- Display surface: 192 mm × 96 mm
- Number of dots (dot): 512 (32 × 16 dot)
- Dot dimension: R, G, B 3 in 1
- Dot pitch: 6.0 mm

■ Absolute Maximum Ratings T_a = 25°C

Parameter	Symbol	Rating	Unit
Operating supply voltage	V_{CC}	– 0.3 to +5.25	V
LED operating supply voltage	V_{LEDA}	+5.2	V
Input voltage	V_{IN}	– 0.3 to V_{CC}+ 0.3	V
Operating ambient temperature	T_{opr}	–10 to +45	°C
Storage temperature	T_{stg}	–25 to +80	°C

■ Recommending Operating Conditions T_a = 25°C±3°C

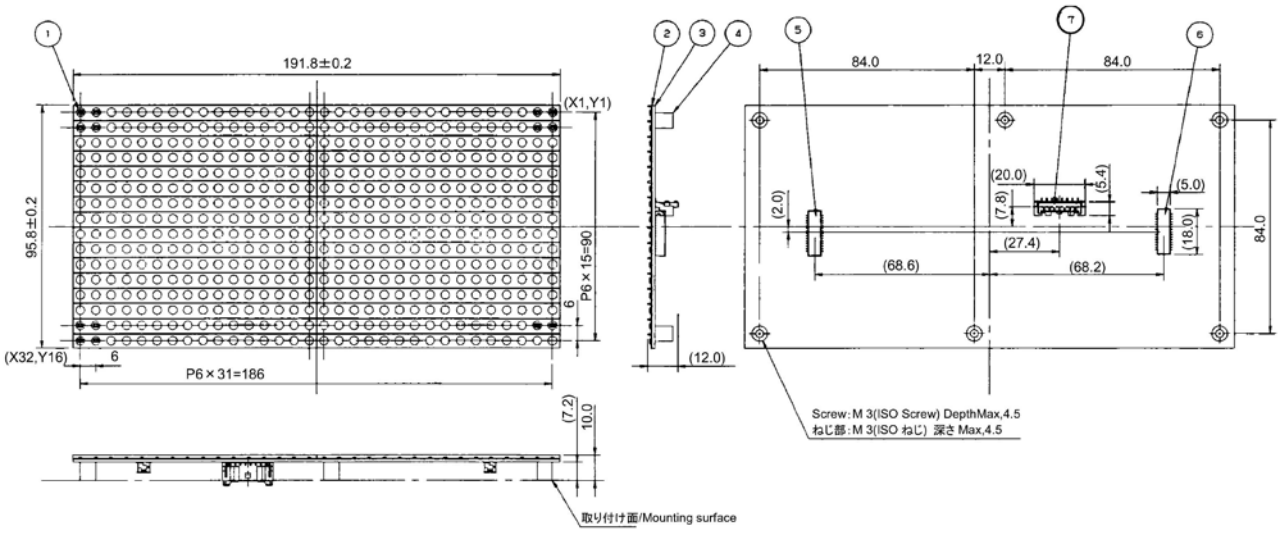
Parameter	Symbol	Min	Typ	Max	Unit
Operating supply voltage	V_{CC}	4.75	5.0	5.25	V
LED operating supply voltage	V_{LEDA}	4.80	5.0	5.20	V
Input voltage	V_{IN}	0.0	—	V_{CC}	V

■ Electro-Optical Characteristics T_a = 25°C±3°C, V_{CC} = V_{LEDA} = 0.5 V

Parameter	Symbol	Specification		Unit
Brightness	—	Red	Typ. 500	cd/m²
		Greem	Typ. 960	cd/m²
		Blue	Typ. 160	cd/m²
		White	Typ. 1 600 (x, y) = (0.25 to 0.30, 0.25 to 0.30)	cd/m²
Gradations	—	Red, Green, Blue for each color 1 024 gradations		—
Modulated light	—	16 stage		—
Peak emission wavelength	λ_p	Red	Typ. 630	nm
		Green	Typ. 520	nm
		Blue	Typ. 465	nm
Viewing angle	$2\theta_{1/2}$	Horizontal direction	170	°
Drive system	—	Duty 1/8 Dynamic lighting		—
Clock frequency (Data transfer)	$f_{CLK(D)}$	4		MHz
Clock frequency (Scanning operation)	$f_{CLK(S)}$	8.192		MHz
Supply current (Logic) *	$I_{CC(LOGIC)}$	Max. 1.0		A
Supply current (LED) *	$I_{CC(LED)}$	Max. 6.1		A

Note) *: Full-color lighting

■ Package (Unit: mm)



- Part name
  1. Chip LED
  2. Reflector
  3. Printed board
  4. Boss
  5. Signal connector (input)
  6. Signal connector (output)
  7. Supply connector

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