

#### 1.2 Megapixel Camera Module With built-in ISP

NCM12-FE-180P is a camera module that features a high-performance image processing engine and includes a compact waterproof chassis.

It has 1280 horizontal and 960 vertical pixels and via 1/3.8" optical format. Optimal for rear view cameras.

#### **1.Features**

- FAKRA connector (pigtail type)
- LVDS(GVIF2) \*1
- HDR

• Waterproof (IP67/IP69K) %1 : GVIF is a registered trademark or trademark of Sony Group Inc. or its affiliates.

### 2.Specification

- Image Sensor
- Shutter Type
- Dimension(mm)
- Effective Pixels
- Pixel Size
- Output Interface
- Output Signal Format
- Frame Rate (Max.)
- Functions

1/3.8-inch CMOS color image sensor Rolling shutter  $31 \times 21.3 \times 21.9 \text{ [mm]}^{*2}$  $1280(\text{H}) \times 960(\text{V})$  $2.9\mu\text{m}(\text{H}) \times 2.9\mu\text{m}(\text{V})$ LVDS(GVIF2) YCbCr422 30fps Auto Exposure Control, Auto White Balance, Auto Gain Control, HDR, Image Inversion (up/down, left/right), Flicker correction, Waterproof & Dustproof Performance (IP67/IP69K), etc.

(H)189°/(V)150°/(D)216°:1280(H)x960(V)

- Angle of View (Typ.
- Optical Filter
- F Number
- Connection Type
- Power Consumption (Typ.) 700 [mW] \*2 : FAKRA connector and Cable part is not included

## 3. Recommended Operating Conditions

• Recommended supply voltage	9.0 [V]	
• Power Supply Voltage	$8.0 \sim 10.0$	[V]
• Operating Temperature	$-30 \sim +80$	[°C] **3
• Storage Temperature	-40 $\sim$ +85	[°C] **3
3: No condensation		

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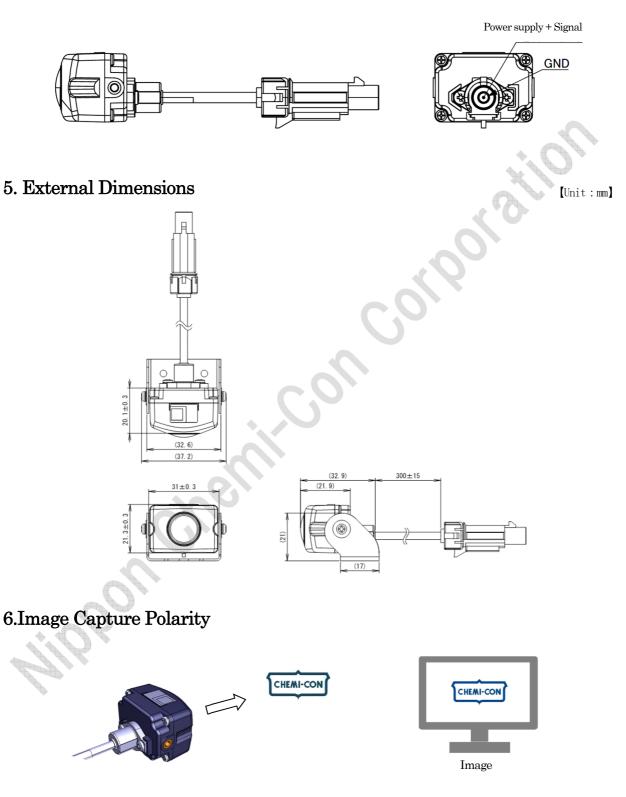
FAKRA relay connector

CHEMI-CON

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4. Terminal Description



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