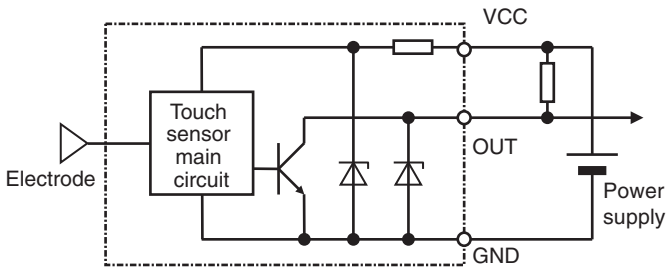
Ratings and Specifications

Detected capacitance ✻	25 ± 5 pF
Power supply voltage	5 VDC (-10%) to 15 VDC (+10%)
Output	Open collector (max. output current: 10 mA)
Residual output voltage	0.4 V max.
Operation mode	When detecting capacitance (human touch detected): Output transistor ON When not detecting capacitance (no human touch detected): Output transistor OFF
Current consumption	10 mA max.
Voltage influence	With rated supply voltage within a range of ±10% and a rate of change for detected capacitance within ±10% when powered using the rated supply voltage
Temperature influence	Within an ambient temperature range when operating and a rate of change for detected capacitance within ±10% at +23°C
Ambient temperature	When in use: -10 to 60°C (no icing or condensation) When in storage: -20 to 70°C (no icing or condensation)
Ambient humidity	25 to 85%RH

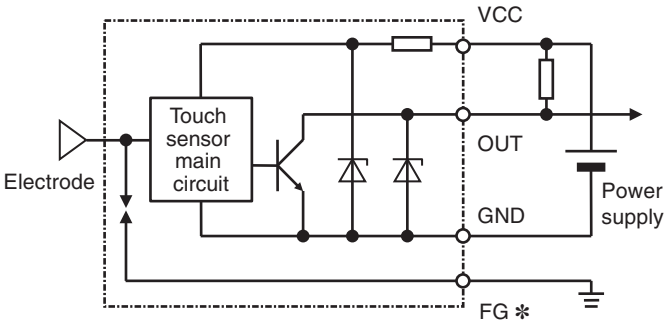
✻"Detected capacitance" refers to the detected capacitance value when capacitance is applied between the electrode and the ground terminal of the touch sensor circuit.

Output Circuit Diagram

FG terminal not provided
(W7ED-11F, W7ED-11L)



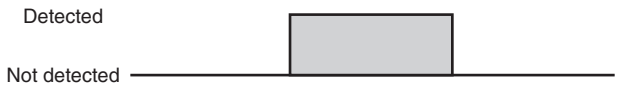
FG terminal provided
(W7ED-12F, W7ED-12L)



✻We recommend connecting the FG terminal to a stable potential on the device's frame ground.

Operation Chart

Capacitance detection



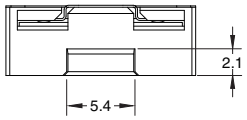
Output transistor

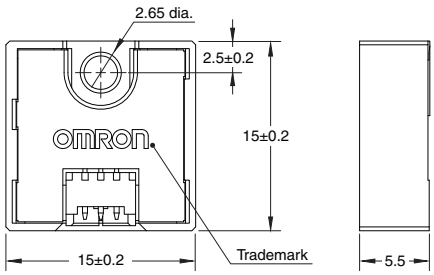
W7ED

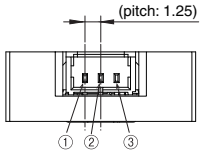
Dimensions

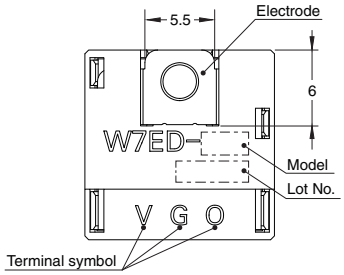
(Unit: mm)

W7ED-11F









Note: 1. Details of connector terminal symbols are shown below.

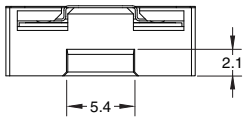
Connector terminal No.	Terminal symbol	Name
1	O	Output (OUT)
2	G	Ground (GND)
3	V	Power supply (VCC)

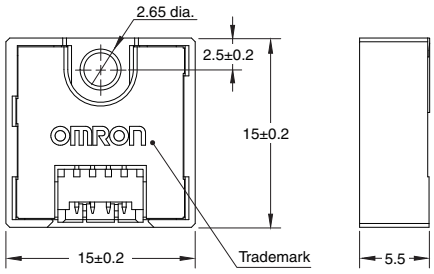
2. Compatible housings for connector include 51021-03□□ series models from Molex.

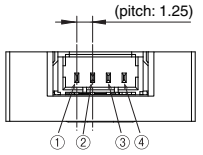
3. The Lot No. is 4-digit number located at the position indicated in the figure.

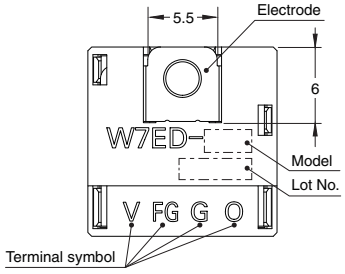
✻ Tolerance class IT16 applies to dimensions in this datasheet unless otherwise specified.

W7ED-12F









Note: 1. Details of connector terminal symbols are shown below.

Connector terminal No.	Terminal symbol	Name
1	O	Output (OUT)
2	G	Ground (GND)
3	FG	Frame ground (FG)
4	V	Power supply (VCC)

2. Compatible housings for connector include 51021-04□□ series models from Molex.

3. The Lot No. is 4-digit number located at the position indicated in the figure.

✻ Tolerance class IT16 applies to dimensions in this datasheet unless otherwise specified.