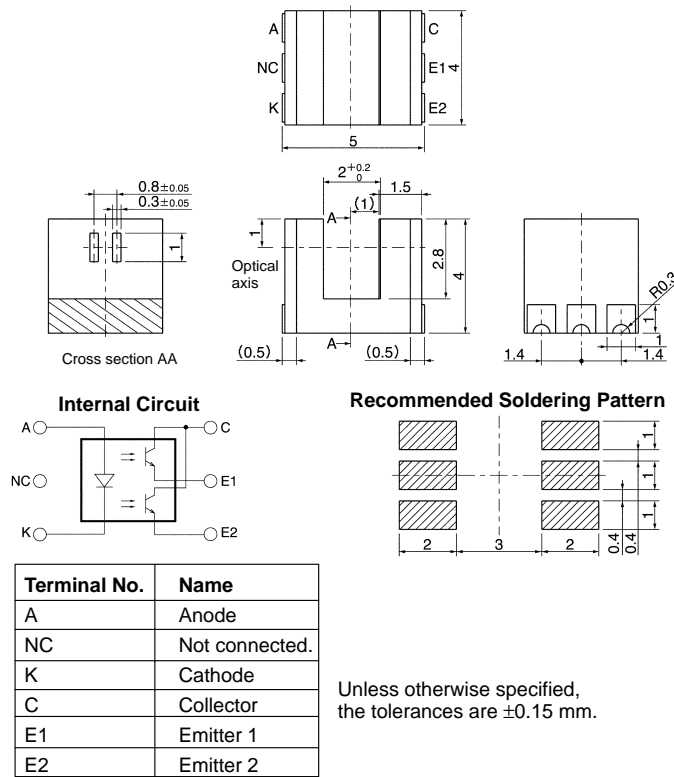


### ■ Dimensions

**Note:** All units are in millimeters unless otherwise indicated.



Terminal No.	Name
A	Anode
NC	Not connected.
K	Cathode
C	Collector
E1	Emitter 1
E2	Emitter 2

Unless otherwise specified, the tolerances are ±0.15 mm.

### ■ Features

- Ultra-compact with a 5-mm-wide sensor and a 2-mm-wide slot.
- PCB surface mounting type.
- High resolution with a 0.3-mm-wide aperture.
- Dual-channel output.

### ■ Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Rated value
Emitter	Forward current	$I_F$ 25 mA (see note 1)
	Pulse forward current	$I_{FP}$ 100 mA (see note 2)
	Reverse voltage	$V_R$ 5 V
Detector	Collector–Emitter voltage	$V_{CEO}$ 20 V
	Emitter–Collector voltage	$V_{ECO}$ 5 V
	Collector current	$I_C$ 20 mA
	Collector dissipation	$P_C$ 75 mW (see note 1)
Ambient temperature	Operating	$T_{opr}$ –30°C to 85°C
	Storage	$T_{stg}$ –40°C to 90°C
	Reflow soldering	$T_{sol}$ 240°C (see note 3)
	Manual soldering	$T_{sol}$ 300°C (see note 3)

- Note:**
1. Refer to the temperature rating chart if the ambient temperature exceeds 25°C.
  2. Duty: 1/100; Pulse width: 0.1 ms
  3. Complete soldering within 10 seconds for reflow soldering and within 3 seconds for manual soldering.

### ■ Electrical and Optical Characteristics (Ta = 25°C)

Item	Symbol	Value	Condition
Emitter	Forward voltage	$V_F$ 1.1 V typ., 1.3 V max.	$I_F = 5$ mA
	Reverse current	$I_R$ 10 $\mu$ A max.	$V_R = 5$ V
	Peak emission wavelength	$\lambda_P$ 940 nm typ.	$I_F = 20$ mA
Detector	Light current	$I_{L1}/I_{L2}$ 50 $\mu$ A min., 150 $\mu$ A typ., 500 $\mu$ A max.	$I_F = 5$ mA, $V_{CE} = 5$ V
	Dark current	$I_D$ 100 nA max.	$V_{CE} = 10$ V, 0 lx
	Leakage current	$I_{LEAK}$ ---	---
	Collector–Emitter saturated voltage	$V_{CE(sat)}$ 0.1 V typ., 0.4 V max.	$I_F = 20$ mA, $I_L = 50$ $\mu$ A
	Peak spectral sensitivity wavelength	$\lambda_P$ 900 nm typ.	---
Rising time	$t_r$ 10 $\mu$ s typ.	$V_{CC} = 5$ V, $R_L = 1$ k $\Omega$ , $I_L = 100$ $\mu$ A	
Falling time	$t_f$ 10 $\mu$ s typ.	$V_{CC} = 5$ V, $R_L = 1$ k $\Omega$ , $I_L = 100$ $\mu$ A	