

IR Sensor KME-M002C

Description

The KME-M002C IR Sensor combines a high-output GaAs IRED with LTV Sensor.

Features

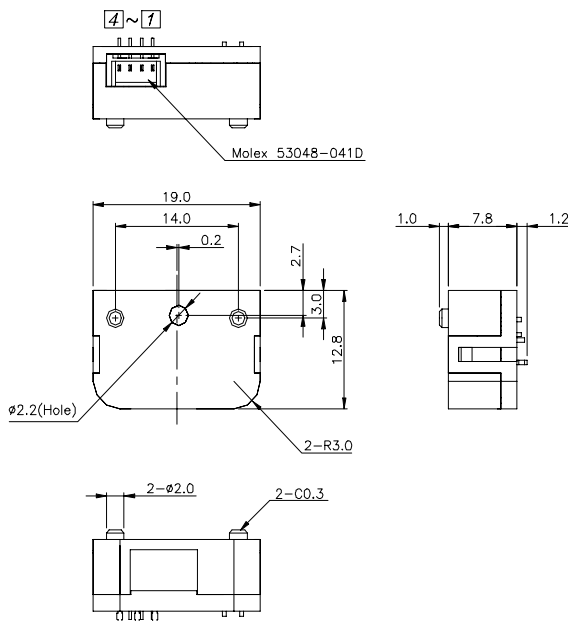
- Dustproof
- Easy Equipping

Application

- ATM
- Auto Calculating M/C
- Vending Machine
- Copiers

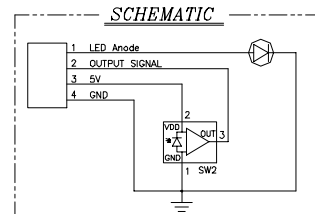


Outline Dimensions

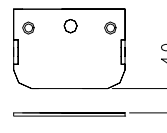


Note

1. Pin Configuration



2. Detecting Distance



3. General Tolerance : ±0.2

[Unit : mm]

Characteristics

[Ta= 25°C]

Parameter		Symbol	Conditions	Min.	Typ.	Max.	Unit
Input	Forward Voltage	V_F	$I_F=20\text{mA}$	-	1.4	1.7	V
	Peak Wavelength	λ_p	$I_F=20\text{mA}$	-	940	-	nm
Output	Supply Voltage	V_{DD}	-	4.5	5.0	5.5	V
	Dark Voltage	V_D	$E_e=0$	0	-	15	mV
	Maximum Output Voltage	V_{OM}	$V_{DD}=4.5\text{V}$	-	4.49	-	V
Transmission	Forward Current	I_F	$l=4\text{mm}, V_{DD}=5\text{V}, V_{TAR}^{(1)}=4.5\text{V}, \text{Kodak } 90\%$	2	-	30	mA
	Low Level Output Voltage	V_{OL}	$l=4\text{mm}, V_{DD}=5\text{V}, I_{TAR}^{(2)}, \text{Art Work Black}$	-	-	1	V
Response Time ⁽³⁾	Rise Time	t_r	$V_{DD}=5\text{V}, R_L = 10\text{k}\Omega$	-	160	-	μs
	Fall Time	t_f		-	150	-	μs

Note 1. V_{TAR} = Target Voltage = 4.5V

Note 2. I_{TAR} = I_F (Forward Current) under V_{TAR} (4.5V)

Note 3. Adjust amplitude and offset of square wave so that V_{out} transitions from 10% to 90% of V_{out} range