

Module No.: PIC-1010SMB

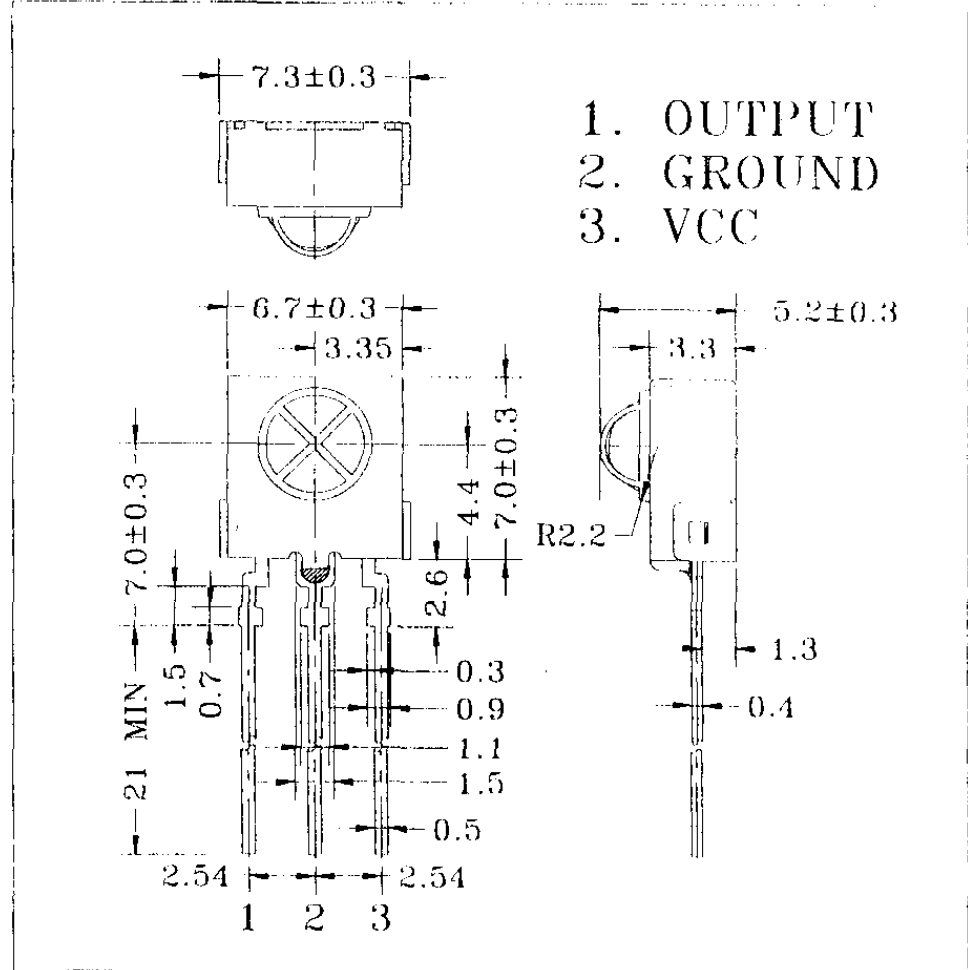
1. Features:

- Miniature size
- Built-in exclusive IC
- Wide half angle & long reception distance
- Good noise-proof capability
- High immunity against ambient light
- High protection ability to EMI
- Back Metal Cover
- Side view
- Mesh
- Low voltage operating: 2.7V

2. Applications

- ☐ AV instruments (Audio, TV, VCR, CD player)
- ☐ Home appliances (Air-conditioner, Fan, Light.)
- ☐ Remote control for wireless devices

Dimensions



3. Absolute Maximum Ratings

(Ta=25°C)

Parameter	Symbol	Ratings	Unit
Supply Voltage	Vcc	7.0	V
Operating Temperature	Topr	-10 ~ +60	°C
Storage Temperature	Tstg	-20 ~ +75	°C
Soldering Temperature *1	Tsol	240	°C

\*1 At the position of 2mm from the bottom of the package within 5 seconds.

4. Electro-optical Characteristics

(Ta=25°C)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Supply voltage	Vcc		2.7	3.3	6.5	V
Current Consumption	Icc	Input Signal = 0		0.8	1.5	mA
Reception Distance	d	200±5Lux	Vcc=3.3V	10	16	m
			Vcc=2.7V	7	10	m
Half Angle	Δθ			±45		deg
B.P.F. Center Frequency	Fo			37.9	45.5	kHz
Peak Wavelength	λp			940		nm
Signal Output	So		--- Active Low ---			
High Level Output Voltage	Voh		Vcc-0.5			V
Low Level Output Voltage	Vol			0.2	0.4	V
High Level Pulse Width	Twh	Burst Wave = 600μs	500	600	700	μs
Low Level Pulse Width	Twl		500	600	700	μs

5. Reliability Test Items

(Ta=25°C)

Test Items	Test Conditions	Ratings
High Temperature Storage	Ta=60°C, Vcc=3.3V	t=240hr.
Low Temperature Storage	Ta=-10°C, Vcc=3.3V	t=240hr.
High Temperature High Humid Storage	Ta=40°C, 90%RH, Vcc=3.3V	t=240hr.
Temperature Cycling	-20°C (30min) ~ +70°C (30min)	20 cycles
Soldering Heat	240±5°C	5 sec.