

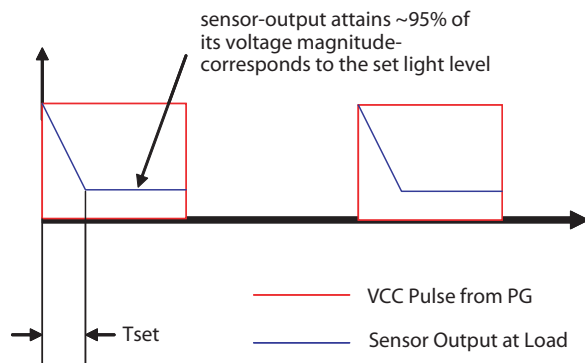
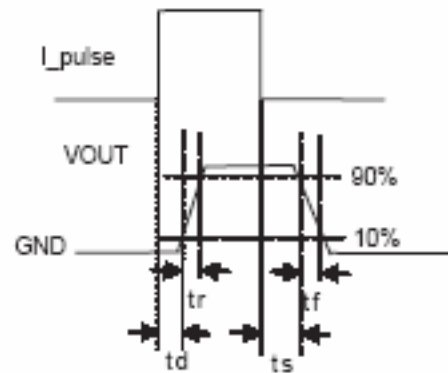
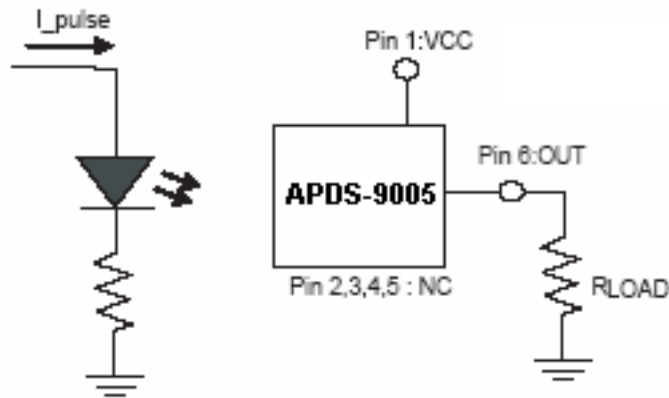
## Electrical & Optical Specifications (Ta=25°C)

| Parameter                   | Symbol                              | Min. | Typ. | Max. | Units | Conditions                                                          |
|-----------------------------|-------------------------------------|------|------|------|-------|---------------------------------------------------------------------|
| Photo Current (I)           | I <sub>PH1</sub>                    | 28   | 40   | 52   | uA    | V <sub>cc</sub> =1.8V, Lux = 100 (2)                                |
| Photo Current (II)          | I <sub>PH2</sub>                    | -    | 44   | -    | uA    | V <sub>cc</sub> =1.8V, Lux = 100 (1)                                |
| Dark Current                | I <sub>DARK</sub>                   | -    | 300  | -    | nA    | V <sub>cc</sub> =3V, Lux = 0                                        |
| Light Current Ratio         | I <sub>PH3</sub> / I <sub>PH2</sub> | -    | 1.1  | -    | -     |                                                                     |
| Rise Time                   | T <sub>r</sub>                      | -    | 5    | -    | ms    | RI = 1Kohm, Lux = 100                                               |
| Fall Time                   | T <sub>f</sub>                      | -    | 5    | -    | ms    | R1 = 1Kohm, Lux=100                                                 |
| Peak sensitivity wavelength | λ                                   | -    | 500  | -    | nm    |                                                                     |
| Settling Time pulsed at Vcc | T <sub>set</sub>                    | -    | 10   | -    | ms    | V <sub>cc</sub> pulsed = 0V to 3V; Rload = 2.4K ohms; Lux = 100 (2) |
| Propagation delay           | T <sub>d</sub>                      | -    | 5    | -    | ms    | RI = 1Kohm, Lux = 100                                               |
| Storage delay               | T <sub>s</sub>                      | -    | 5    | -    | ms    | R1 = 1Kohm, Lux=100                                                 |
| Saturation voltage          | Vsat                                | 1.0  | -    | -    | V     | R1 = 150Kohm, Lux = 100                                             |

Note :

- 1) Illuminance by incandescent lamp
- 2) White LED is used as light source

## Light Measurement Circuit and Waveforms



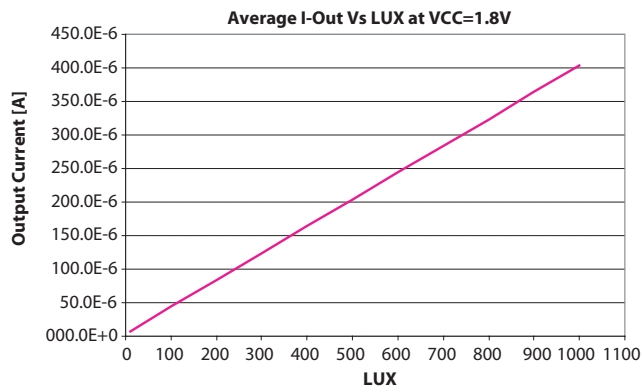


Figure 3. Average Iout Vs Lux (Vcc = 1.8V, T=25°C, White LED source)

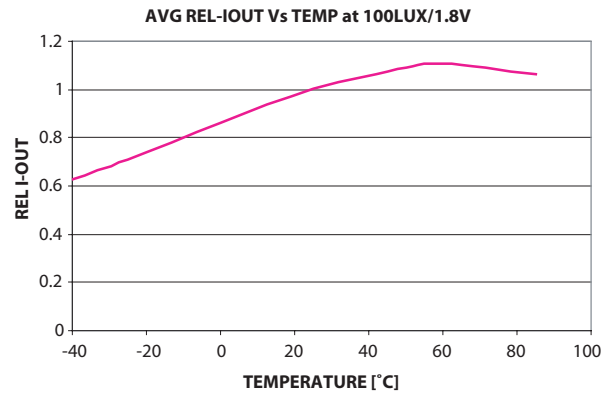


Figure 4. Average relative Iout Vs Temp (Vcc = 1.8V, T=25°C, 100 Lux)

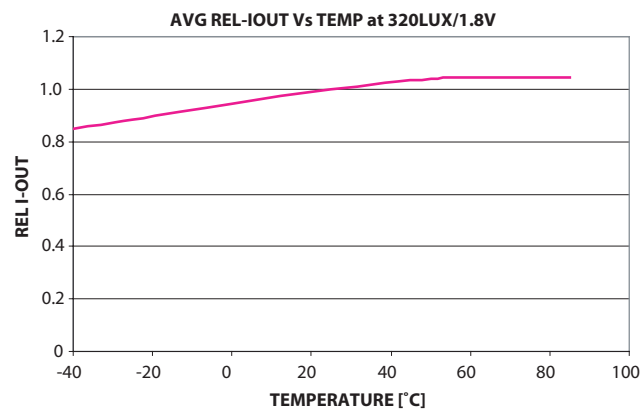


Figure 5. Relative Output Current Vs Temp (Vcc = 1.8V, 100 Lux)

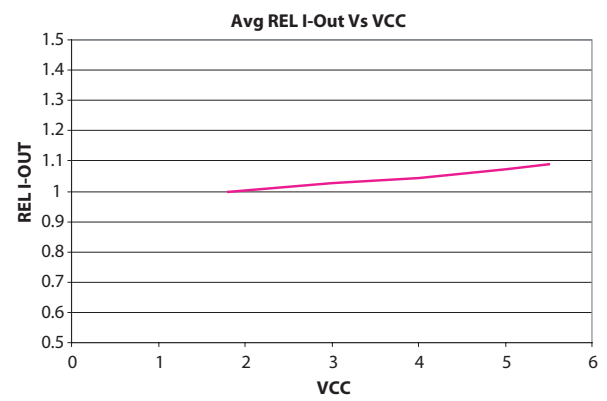


Figure 6. Relative Output Current Vs Vcc (Ta = 25°C, 100Lux)

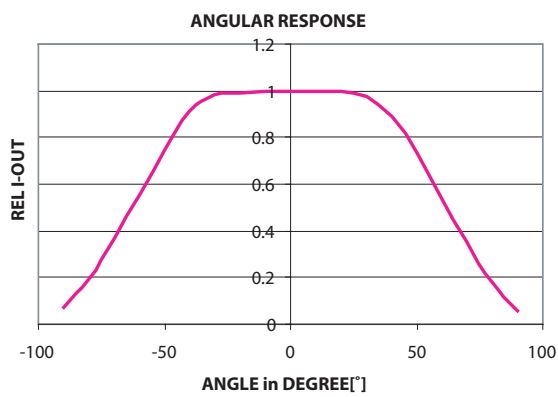


Figure 7. Relative Iout Vs Angle (Vcc = 1.8V, Ta = 25°C)

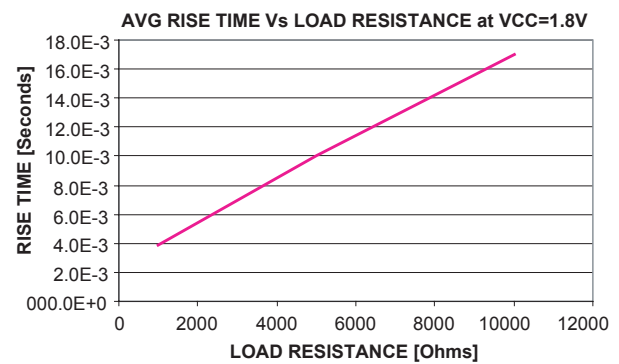


Figure 8. Average Rise Time Vs Load Resistance at Vcc = 1.8V