

BIOMETRICS MONITORING

Heart Rate and Blood Oxygen

USING HIGHLY SENSITIVE PHOTODIODES

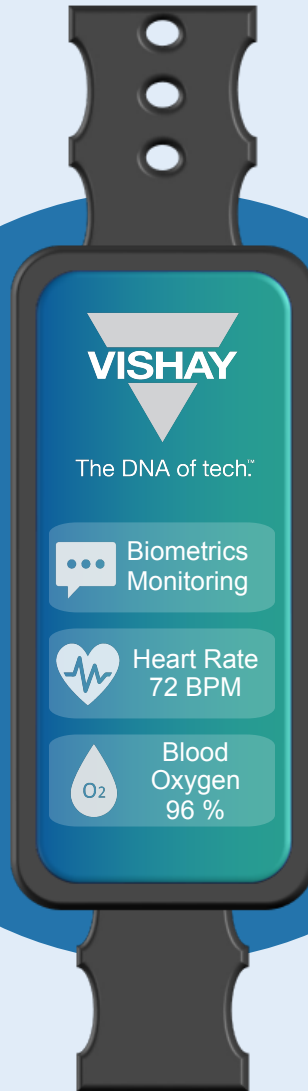
Biometrics monitoring in wearable devices such as smart watches, rings or headphones are using different wavelength emitters paired with highly sensitive photodiodes to complete the tasks of heart rate monitoring (HRM) and blood oxygen measurement (SpO_2)



Heart Rate Monitoring

Key wavelength: Green light - 530 nm

Wearables

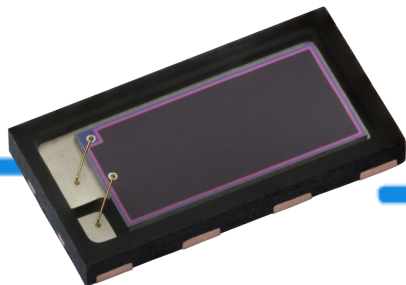


Photodiodes

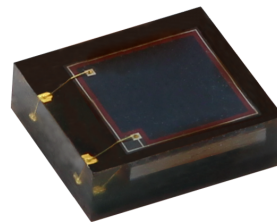


Blood Oxygen Measurement

Key wavelength: Red light - 660 nm
Infrared light - 940 nm



VEMD8081
(4.8 x 2.5 x 0.48) mm
Active area: 5.4 mm²



VEMD2704
(2.0 x 1.8 x 0.6) mm
Active area: 1.51 mm²

