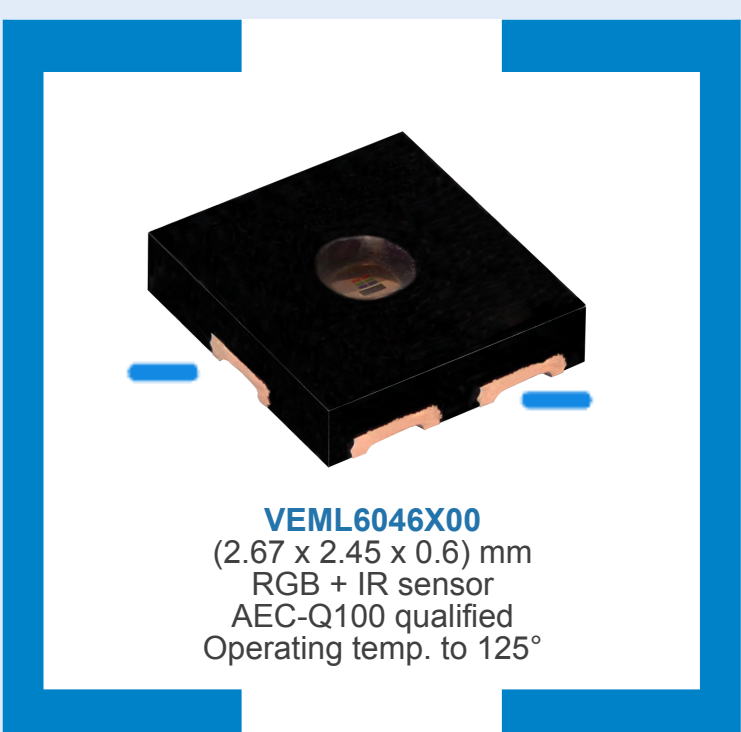
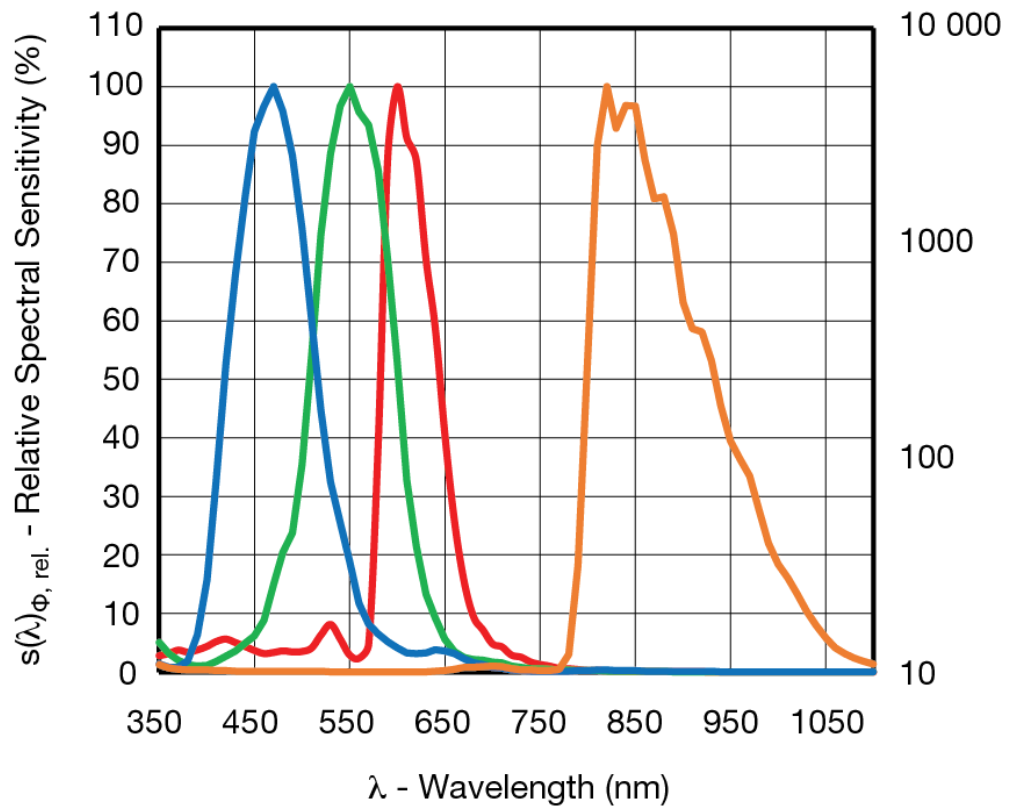
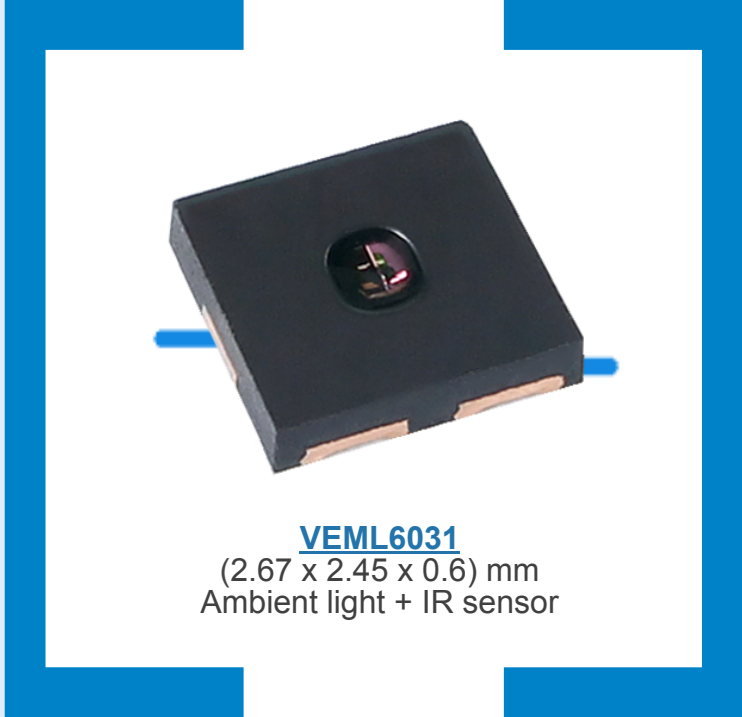
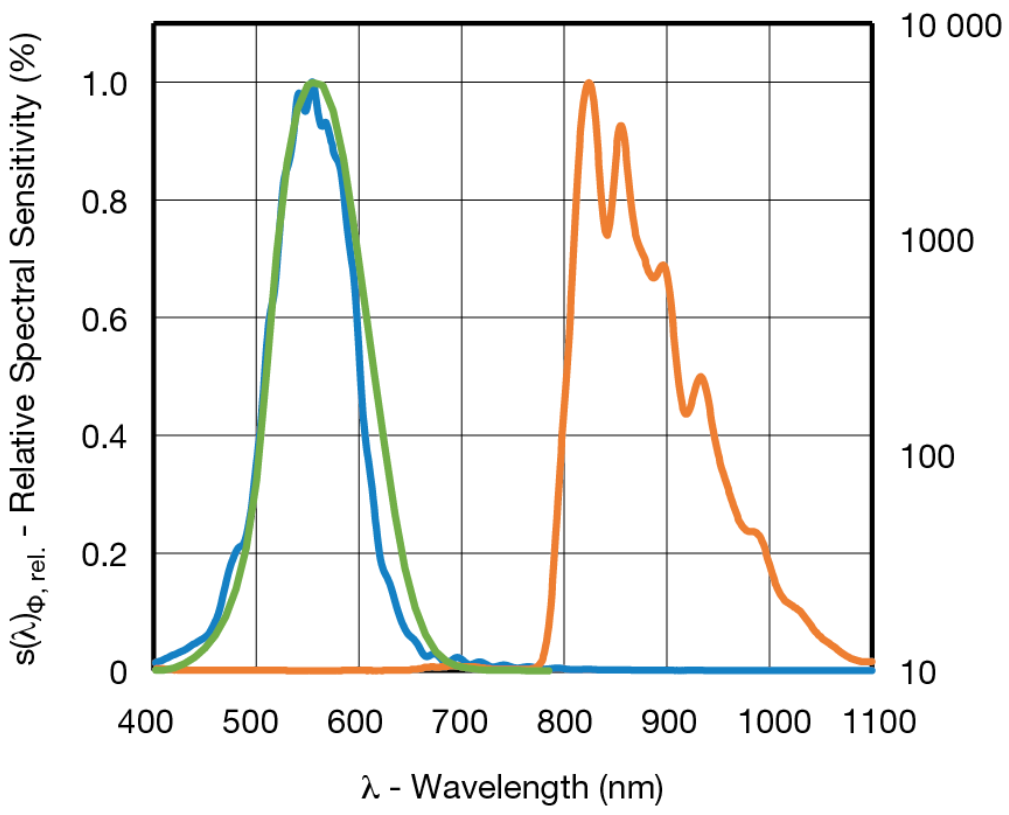


Head Up Display

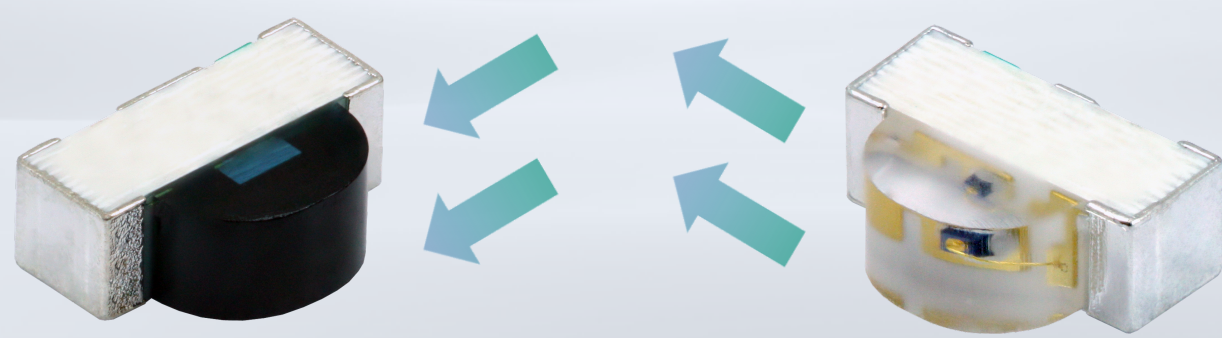
LIGHT SENSING AND BLOCKING OBJECT DETECTION

Head up displays (HUD) need light sensors to adapt the display brightness / color to the environment. Automotive-qualified sensors include the VEML6031 with one channel for visible light information and an infrared (IR) light channel. The VEML6046 has three separate color channels and a white and an IR channel to allow for more accurate readings of the environment and to adapt flexible changes to the HUD.



Light Curtain

With an IR emitter and detector, as seen in the diagram below, using automotive-qualified parts, a light curtain can be realized to detect blocking objects on a HUD.



VEMD10940FX01
PIN Photodiode
(3.0 x 2.0 x 1.0) mm

VSMB10941FX01
IR Emitter
(3.0 x 2.0 x 1.0) mm