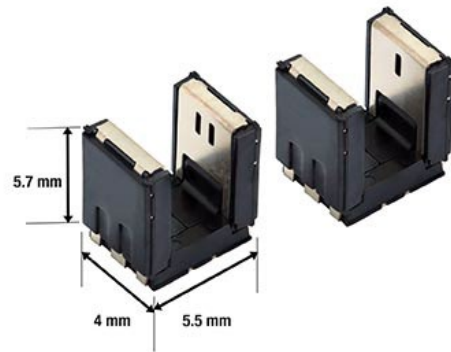


Offered in Compact 5.5 mm x 4 mm x 5.7 mm SMD Package, High Dome Single- and Dual-Channel Transmissive Sensors Offer Greater Vertical Headroom and Design Flexibility for Position Sensing and Optical Encoding Industrial and Consumer Applications

Product Benefits:

- Single- and dual-channel devices available
- Compact 5.5 mm by 4 mm by 5.7 mm surface-mount package
- Typical output current of 1.5 mA
- Operate at a wavelength of 950 nm
- 3 mm gap width
- 0.3 mm aperture width
- Typical rise and fall times of 14 μ s and 21 μ s, respectively
- Moisture Sensitivity Level rating of 1 (MSL1)
- Compatible with lead (Pb)-free reflow solder processes according to JEDEC-STD-020
- Halogen-free, RoHS-compliant, and Vishay Green



Market Applications:

- Position sensors for encoders in industrial automation systems and drives and tools; consumer entertainment products, appliances, and health and care devices; switches, relays, and antennas; and mobile broadband routers

The News:

Vishay Intertechnology expands its transmissive sensor family with the introduction of two new surface-mount devices for industrial, consumer, and telecom applications. Offered in a compact 5.5 mm by 4 mm by 5.7 mm package, the Vishay Semiconductors single-channel VT171P and dual-channel VT172U feature a 42 % increased dome height compared with previous-generation industrial devices.

- Thanks to their high dome height, the devices allow for increased flexibility in mechanical designs, while offering more vertical headroom for large code wheels in turn-and-push applications
- Both sensors can detect motion and speed. With dual channels, the VT172U can also be used to detect direction
- The single-channel VT171P includes an infrared emitter and phototransistor detector located face-to-face in a surface-mount package, while the dual-channel VT172U includes an infrared emitter and two phototransistor detectors



The Key Specifications:

| | | |
|------------------------|---------------|--------|
| Part number | VT171P | VT172U |
| Channels | Single | Dual |
| Dimensions (mm) | 5.5 x 4 x 5.7 | |
| Output current (mA) | 1.5 | |
| Gap width (mm) | 3 | |
| Aperture width (mm) | 0.3 | |
| Typical rise time (µs) | 14 | |
| Typical fall time(µs) | 21 | |

Availability:

Samples and production quantities of the transmissive sensors are available now, with lead times of 10 weeks.

To access the product datasheets on the Vishay Website, go to

<http://www.vishay.com/ppg?80507> (VT171P)

<http://www.vishay.com/ppg?80508> (VT172U)

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