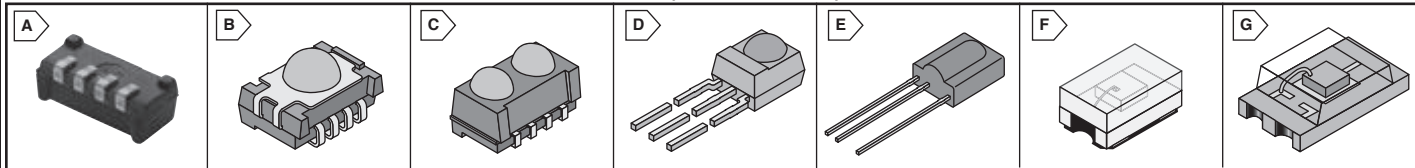


VISHAY Opto Components

RoHS Compliant This product is RoHS compliant.



IR RECEIVERS FOR 3D TV

Vishay Intertechnology has developed two infrared receivers specifically for the LCD shutter glasses used with 3D-ready TV sets. These receivers are designed to be assembled into active 3D glasses, where they received infrared signals from the TV set and ensure the glasses' LCD shutters open and close in proper synchronization to create the 3D effect.

- Features:**
- Eliminates possible interference from TV and set-top box remote control signals
 - Eliminates interference with remote control emitters and receivers
 - Enables more streamlined designs for 3D glasses

For quantities of 2000 and up, call for quote.

| MOUSER STOCK NO. | | Fig. | Supply Voltage (V) | Supply Current (Typ.)(mA) | Carrier Frequency (kHz) | Trans. Dist. (m) | Irradiance (Typ.) (mW/sqm) | Power Consumption (mW) | Directivity (°) | Burst Length Cycles/Burst | Price Each | | | |
|------------------|---------------|------|--------------------|---------------------------|-------------------------|------------------|----------------------------|------------------------|-----------------|---------------------------|------------|-----|-----|------|
| Mfr. | Mfr. Part No. | | | | | | | | | | 1 | 100 | 500 | 1000 |
| 782 | —TSOP35D25TT | A | 2.5 to 5.5 | 0.35 | 25 | 26 | 0.15 | 10 | ±50 | ⇒6 | .92 | .77 | .63 | .56 |
| 782 | —TSOP75D25TT | A | 2.5 to 5.5 | 0.35 | 25 | 26 | 0.15 | 10 | ±50 | ⇒6 | .92 | .77 | .63 | .56 |

RECEIVERS

- Features:**
- High sensitivity for a large transmission range (35 m/120 ft)
 - Available for carrier frequencies from 30 kHz up to 56 kHz
 - No external components necessary
 - Output compatible for use with a micro-controller
 - Relevant quality certifications ISO 9001, QS9000VDA6.1



- Applications:**
- TV sets
 - Video recorders
 - Satellite receivers
 - DVD players
 - Slide projectors
 - Air-conditioners
 - Sensors and Light barrier systems for long distances

For quantities of 2000 and up, call for quote.

| MOUSER STOCK NO. | | Fig. | Supply Voltage (V) | Supply Current (Typ.)(mA) | Carrier Frequency (kHz) | Trans. Dist. (m) | Min. Irradiance (Max.) mW/m2 | Max. Irradiance (Min.) W/m2 | Power Consumption (mW) | Directivity (°) | Burst Length Cycles/Burst | Price Each | | | | |
|----------------------|----------------|------|--------------------|---------------------------|-------------------------|------------------|------------------------------|-----------------------------|------------------------|-----------------|---------------------------|------------|------|------|------|--|
| Mfr. | Mfr. Part No. | | | | | | | | | | | 1 | 100 | 500 | 1000 | |
| Surface Mount | | | | | | | | | | | | | | | | |
| 782 | —TSOP36136 | B | 2.7 to 5.5 | 1.2 | 36 | 35 | 600 | 30 | 30 | ±45 | ⇒6 | 1.15 | 1.08 | 1.04 | .93 | |
| 782 | —TSOP36138 | B | 2.7 to 5.5 | 1.2 | 38 | 35 | 600 | 30 | 30 | ±45 | ⇒6 | 1.50 | 1.20 | .99 | .87 | |
| 782 | —TSOP36156 | B | 2.7 to 5.5 | 1.2 | 56 | 35 | 600 | 30 | 30 | ±45 | ⇒6 | 1.50 | 1.20 | .99 | .87 | |
| 782 | —TSOP36236 | B | 2.7 to 5.5 | 1.2 | 36 | 35 | 600 | 30 | 30 | ±45 | ⇒6 | 1.43 | 1.14 | .94 | .83 | |
| 782 | —TSOP36238 | B | 2.7 to 5.5 | 1.2 | 38 | 35 | 600 | 30 | 30 | ±45 | ⇒6 | 1.65 | 1.57 | 1.31 | .785 | |
| 782 | —TSOP36256 | B | 2.7 to 5.5 | 1.2 | 56 | 35 | 600 | 30 | 30 | ±45 | ⇒6 | 1.43 | 1.14 | .94 | .83 | |
| 782 | —TSOP5038 | B | 2.7 to 5.5 | 5 | 38 | 30 | 1 | 30 | 10 | ±50 | ----- | .90 | .72 | .59 | .52 | |
| 782 | —TSOP6136 | B | 4.5 to 5.5 | 1.2 | 36 | 35 | 0.45 | 30 | 10 | ±50 | ⇒6 | 1.13 | .90 | .74 | .65 | |
| 782 | —TSOP6138 | B | 4.5 to 5.5 | 1.2 | 38 | 35 | 0.45 | 30 | 10 | ±50 | ⇒6 | 1.34 | 1.13 | .92 | .817 | |
| 782 | —TSOP6156 | B | 4.5 to 5.5 | 1.2 | 56 | 35 | 0.45 | 30 | 10 | ±50 | ⇒6 | 1.41 | 1.13 | .93 | .817 | |
| 782 | —TSOP6236 | B | 4.5 to 5.5 | 1.2 | 36 | 35 | 0.45 | 30 | 10 | ±50 | ⇒10 | 1.35 | 1.08 | .89 | .78 | |
| 782 | —TSOP6238 | B | 4.5 to 5.5 | 1.2 | 38 | 35 | 0.45 | 30 | 10 | ±50 | ⇒10 | 1.29 | 1.08 | .889 | .78 | |
| 782 | —TSOP6256 | B | 4.5 to 5.5 | 1.2 | 56 | 35 | 0.45 | 30 | 10 | ±50 | ⇒10 | 1.35 | 1.08 | .89 | .78 | |
| 782 | —TSOP75238 | C | 2.5 to 5.5 | 3 | 38 | 45 | 0.35 | 30 | 10 | ±50 | ⇒10 | .85 | .68 | .56 | .49 | |
| Thru-Hole | | | | | | | | | | | | | | | | |
| 782 | —TSOP32338SS1V | D | 2.5 to 5.5 | 0.35 | 38 | 45 | 0.1 | 30 | 10 | ±45 | ⇒6 | .70 | .63 | .50 | .45 | |
| 782 | —TSOP32438SS1V | D | 2.5 to 5.5 | 0.35 | 38 | 45 | 0.1 | 30 | 10 | ±45 | ⇒6 | .70 | .63 | .50 | .45 | |
| 782 | —TSOP38238SS1V | E | 2.5 to 5.5 | 0.35 | 38 | 45 | 0.15 | 30 | 10 | ±45 | ⇒6 | .63 | .56 | .45 | .40 | |
| 782 | —TSOP38338SS1V | E | 2.5 to 5.5 | 0.35 | 38 | 45 | 0.15 | 30 | 10 | ±45 | ⇒6 | .63 | .56 | .45 | .40 | |
| 782 | —TSOP2436 | D | 2.5 to 5.5 | 3 | 36 | 45 | 0.25 | 30 | 10 | ±45 | ⇒10 | 1.10 | .88 | .73 | .64 | |
| 782 | —TSOP2438 | D | 2.5 to 5.5 | 3 | 38 | 45 | 0.25 | 30 | 10 | ±45 | ⇒10 | 1.10 | .88 | .73 | .64 | |
| 782 | —TSOP31236 | E | 2.5 to 5.5 | 0.35 | 36 | 45 | 0.35 | 30 | 10 | ±45 | ⇒10 | 1.20 | .77 | .695 | .666 | |
| 782 | —TSOP31238 | E | 2.5 to 5.5 | 0.35 | 38 | 45 | 0.35 | 30 | 10 | ±45 | ⇒10 | 1.12 | .94 | .77 | .635 | |
| 782 | —TSOP34833 | D | 2.5 to 5.5 | 3 | 33 | 45 | 0.25 | 30 | 10 | ±45 | ⇒10 | 1.00 | .96 | .79 | .70 | |
| 782 | —TSOP38238 | E | 2.5 to 5.5 | 3 | 38 | 45 | 0.35 | 30 | 10 | ±45 | ⇒10 | .65 | .52 | .43 | .38 | |
| 782 | —TSOP39336 | E | 2.5 to 5.5 | 3 | 36 | 45 | 0.35 | 30 | 10 | ±45 | ⇒6 | 6.50 | 5.20 | 4.29 | 3.77 | |
| 782 | —TSOP32136 | D | 2.7 to 5.5 | 1.2 | 36 | 35 | 0.25 | 30 | 10 | ±45 | ⇒6 | 1.03 | 1.00 | .82 | .72 | |
| 782 | —TSOP32138 | D | 2.7 to 5.5 | 1.2 | 38 | 35 | 0.25 | 30 | 10 | ±45 | ⇒6 | 1.03 | 1.00 | .82 | .72 | |
| 782 | —TSOP32156 | D | 2.7 to 5.5 | 1.2 | 56 | 35 | 0.25 | 30 | 10 | ±45 | ⇒6 | 1.03 | 1.00 | .82 | .72 | |
| 782 | —TSOP34136 | D | 2.7 to 5.5 | 1.2 | 36 | 35 | 0.25 | 30 | 10 | ±45 | ⇒6 | 1.25 | 1.00 | .82 | .72 | |
| 782 | —TSOP34138 | D | 2.7 to 5.5 | 1.2 | 38 | 35 | 0.25 | 30 | 10 | ±45 | ⇒6 | 1.19 | 1.00 | .82 | .72 | |
| 782 | —TSOP34156 | D | 2.7 to 5.5 | 1.2 | 56 | 35 | 0.25 | 30 | 10 | ±45 | ⇒6 | 1.25 | 1.00 | .82 | .72 | |
| 782 | —TSOP32236 | D | 2.7 to 5.5 | 1.2 | 36 | 35 | 0.25 | 30 | 10 | ±45 | ⇒10 | 1.20 | .96 | .79 | .70 | |
| 782 | —TSOP32238 | D | 2.7 to 5.5 | 1.2 | 38 | 35 | 0.25 | 30 | 10 | ±45 | ⇒10 | 1.55 | 1.05 | .886 | .719 | |
| 782 | —TSOP32256 | D | 2.7 to 5.5 | 1.2 | 56 | 35 | 0.25 | 30 | 10 | ±45 | ⇒10 | 1.00 | .95 | .79 | .648 | |
| 782 | —TSOP34836 | D | 2.7 to 5.5 | 1.2 | 36 | 35 | 0.25 | 30 | 10 | ±45 | ⇒10 | 1.14 | .95 | .79 | .648 | |
| 782 | —TSOP34838 | D | 2.7 to 5.5 | 1.2 | 38 | 35 | 0.25 | 30 | 10 | ±45 | ⇒10 | 1.43 | 1.05 | .886 | .719 | |
| 782 | —TSOP34856 | D | 2.7 to 5.5 | 1.2 | 56 | 35 | 0.25 | 30 | 10 | ±45 | ⇒10 | 1.00 | .96 | .79 | .70 | |
| 782 | —TSOP1136 | E | 4.5 to 5.5 | 1.2 | 36 | 35 | 0.35 | 30 | 10 | ±45 | ⇒6 | 1.15 | .74 | .665 | .637 | |
| 782 | —TSOP1138 | E | 4.5 to 5.5 | 1.2 | 38 | 35 | 0.35 | 30 | 10 | ±45 | ⇒6 | 1.11 | .93 | .77 | .67 | |
| 782 | —TSOP1156 | E | 4.5 to 5.5 | 1.2 | 56 | 35 | 0.35 | 30 | 10 | ±45 | ⇒6 | .97 | .75 | .675 | .647 | |
| 782 | —TSOP2136 | D | 4.5 to 5.5 | 1.2 | 36 | 35 | 0.4 | 30 | 50 | ±45 | ⇒6 | .97 | .75 | .675 | .67 | |
| 782 | —TSOP2138 | D | 4.5 to 5.5 | 1.2 | 38 | 35 | 0.4 | 30 | 50 | ±45 | ⇒6 | .97 | .75 | .675 | .67 | |
| 782 | —TSOP2156 | D | 4.5 to 5.5 | 1.2 | 56 | 35 | 0.5 | 30 | 50 | ±45 | ⇒6 | 1.10 | .93 | .77 | .67 | |
| 782 | —TSOP4136 | D | 4.5 to 5.5 | 1.2 | 36 | 35 | 0.35 | 30 | 10 | ±45 | ⇒6 | 1.16 | .93 | .77 | .67 | |
| 782 | —TSOP4138 | D | 4.5 to 5.5 | 1.2 | 38 | 35 | 0.35 | 30 | 10 | ±45 | ⇒6 | 1.16 | .93 | .77 | .67 | |
| 782 | —TSOP4156 | D | 4.5 to 5.5 | 1.2 | 56 | 35 | 0.35 | 30 | 10 | ±45 | ⇒6 | 1.16 | .93 | .77 | .67 | |
| 782 | —TSOP1236 | E | 4.5 to 5.5 | 0.6 | 36 | 35 | 0.35 | 30 | 10 | ±45 | ⇒10 | 1.10 | .88 | .73 | .64 | |
| 782 | —TSOP2236 | D | 4.5 to 5.5 | 1.2 | 36 | 35 | 0.35 | 30 | 10 | ±45 | ⇒10 | 1.05 | .88 | .73 | .659 | |
| 782 | —TSOP2238 | D | 4.5 to 5.5 | 1.2 | 38 | 35 | 0.35 | 30 | 10 | ±45 | ⇒10 | 1.05 | .88 | .73 | .659 | |
| 782 | —TSOP2256 | D | 4.5 to 5.5 | 1.2 | 56 | 35 | 0.35 | 30 | 10 | ±45 | ⇒10 | 1.05 | .88 | .73 | .635 | |
| 782 | —TSOP4830 | D | 4.5 to 5.5 | 1.1 | 30 | 35 | 0.35 | 30 | 10 | ±45 | ⇒10 | .91 | .88 | .73 | .64 | |
| 782 | —TSOP4836 | D | 4.5 to 5.5 | 1.1 | 36 | 35 | 0.35 | 30 | 10 | ±45 | ⇒10 | 1.10 | .88 | .73 | .64 | |
| 782 | —TSOP4838 | D | 4.5 to 5.5 | 1.1 | 38 | 35 | 0.35 | 30 | 10 | ±45 | ⇒10 | .95 | .76 | .63 | .55 | |
| 782 | —TSOP4840 | D | 4.5 to 5.5 | 1.1 | 40 | 35 | 0.35 | 30 | 10 | ±45 | ⇒10 | 1.05 | .88 | .72 | .595 | |
| 782 | —TSOP4856 | D | 4.5 to 5.5 | 1.1 | 56 | 35 | 0.35 | 30 | 10 | ±45 | ⇒10 | 1.10 | .88 | .73 | .64 | |

AMBIENT LIGHT SENSOR

- Features:**
- Adapted to human eye responsivity
 - High photo sensitivity
 - Suppression filter for near infrared radiation
 - Floor life: 168 h, MSL 3, acc. J-ST-020
 - AEC-Q101 qualified

- Applications:**
- Automotive sensors
 - Ambient light sensors
 - Mobile phones
 - Notebooks
 - Computers
 - Cameras
 - PDA's

For quantities of 2000 and up, call for quote.

| MOUSER STOCK NO. | | Fig. | V _{BR} | | Angle of Half Intensity (°) | Reverse Dark Current (max.)(nA) | Reverse Light Current (typ.)(µA) | Peak Emission Wavelength (nm) | Diode Capacitance (V _R =0 (pF) | Rise/Fall Times (typ.)(ns) | Price Each | | | |
|------------------|---------------|------|-----------------|-----------|-----------------------------|---------------------------------|----------------------------------|-------------------------------|---|----------------------------|------------|------|------|------|
| Mfr. | Mfr. Part No. | | (V) (min) | @ IR (µA) | | | | | | | 1 | 100 | 500 | 1000 |
| 78 | —TEMT6000 | F | ----- | ----- | ±60 | 0.05 | 10 | 570 | ----- | ----- | 1.13 | .87 | .61 | .56 |
| 782 | —TEMT6200F | F | ----- | ----- | ±60 | 0.03 | 4.6 | 550 | ----- | ----- | .74 | .59 | .49 | .43 |
| 782 | —TEMD6010FX01 | G | 16 | 100 | ±60 | 0.03 | 1 | 540 | 60 | ----- | 1.76 | 1.32 | 1.03 | .88 |
| 782 | —TEMD6200FX01 | F | 16 | 100 | ±60 | 5 | 0.04 | 540 | 60 | 150/150 | .79 | .63 | .52 | .46 |