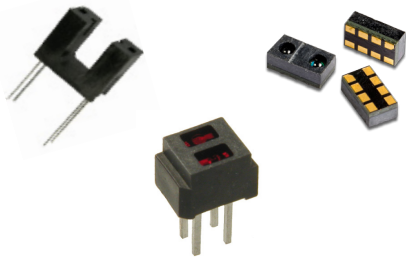


Component Devices

TT Electronics' components consists of GaAIAs/ GaAs LEDs, photodarlington, photodiodes, Photologic® detectors, phototransistors and VCSELs. Components are available in both metal packages (Pill, TO-5, TO-18, TO-46) and plastic packages (T-1, T-1 3/4, endlooker, sidelooker).

Applications

- Assembly line automation
- End of travel sensor
- Machine automation

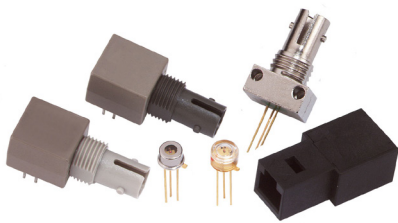


Reflective and Slotted Switches

Along with a broad portfolio of optical switches, TT Electronics offers customized solutions to meet the exact requirements of your application. These custom sensor assemblies can come with a wide variety of packages and sensitivities including the integration of PCBs, cables, and connectors.

Applications

- Non-contact object sensing
- Assembly line automation
- Machine control & safety
- End of travel sensing
- Door / window closure

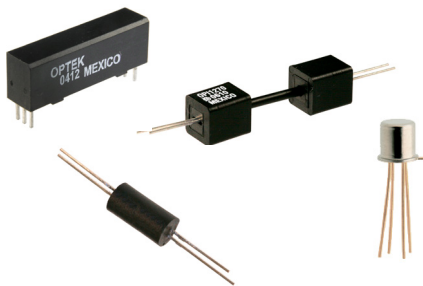


Fiber Optics

TT Electronics' fiber optics family consists of point source GaAIAs LEDs, integrated receivers, photodiodes, ST-connectorized components (actively aligned) and VCSELs.

Applications

- Copper-to-fiber media conversion
- HVAC EMI immunity
- Industrial ethernet equipment

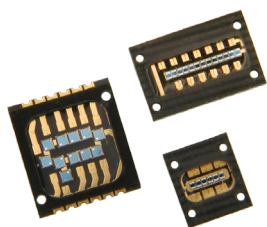


Optocouplers and Optoisolators

Our optoisolators are available in hermetic and plastic component configurations with isolation voltage ranging from 6KV up to 50KV. Creepage of 32mm or higher is available for demanding applications. Our optoisolators offer high dV/dt for electrical noise immunity.

Applications

- Power supply
- IGBT drive
- Defibrillator



Hybrids

Our hybrid family consists of GaAIA LEDs, photodiodes, photodiode arrays, phototransistors, and VCSELs. All devices have wide operating temperatures and are manufactured with controlled tolerances ($\pm .005"$). We can package any die in a standard or custom frame.

Applications

- Machine automation
- Patient monitoring
- Optical encoding
- Non-contact, reflective, and transmissive sensing