

# ACT45L Common Mode Filters

## Common Mode Filters for Automotive LAN



TDK has developed the ACT45L type common mode filter for in-vehicle Ethernet systems. The ACT45L common mode filter achieves an excellent mode conversion characteristic  $S_{cd21}$  while offering a high inductance value of  $200\mu\text{H}$ , owing to TDK's unique winding technology and high precision automatic winding system. The ACT45L has achieved excellent noise suppression characteristics in a small and low-profile form.

### Features

- Consistently ensures high quality and reliability thanks to fully automated production processes
- Solderless design
- AEC-Q200 certified
- Operating temperature range of  $-40^{\circ}\text{C}$  to  $+105^{\circ}\text{C}$
- Storage temperature range of  $-40^{\circ}\text{C}$  to  $+105^{\circ}\text{C}$  after the PC board is mounted
- When mounting, the terminal and winding tape splicing part do not fuse

Automotive

Common Mode Filter

Small Size



[Datasheet](#)

### Applications

- EMC measure in in-vehicle Ethernet systems for communication of video images from on-board cameras or audio signals

## ACT45L Series Information

**Case Size:** (EIA 1812) 4.5 x 3.2 x 2.8mm  
**Common Mode Inductance (100kHz):**  $200\mu\text{H} +60/-20\mu\text{H}$   
**DC Resistance (max):**  $4.5\Omega$   
**Current Rating (max):** 100mA

2,500 pieces per reel