

## **OPTOCOUPLERS** VOM452T/VOM453T



# High-Speed Optocouplers 1 MBd in SOP-5 package

## FEATURES

- Compact surface-mount device
- High speed: 1 MBd
- 15 kV/µs minimum common mode transient immunity

## BENEFITS

- Saves more than 75 % board space compared to DIP-8 SMD
- More than 50 times faster than standard phototransistor optocoupler
- High noise immunity for electrically noisy environments

## **APPLICATIONS**

- Industrial serial bus communication
- AC/DC and DC/DC power supplies
- Replacement of pulse transformers
- Isolation of ground planes

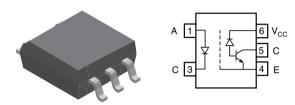


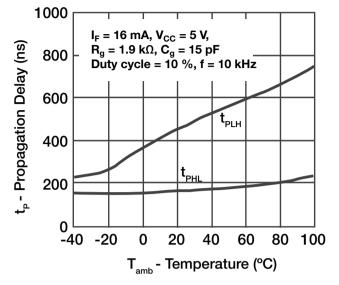
# VOM452T/VOM453T

## Vishay Semiconductors

### SAFETY AGENCY

- UL1577, file no. E52744 system code U •
- cUL file no. E52744, equivalent to CSA bulletin 5A

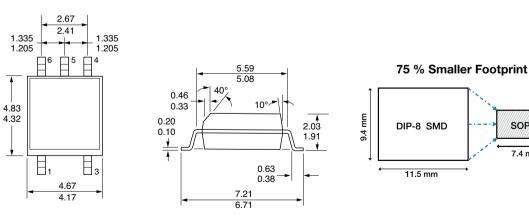




Propagation Delay vs. Temperature

1MBd SOP-5			
Parameter Description	Symbol/Units	VOM452T	VOM453T
Current transfer ratio	CTR min (%)	15	15
Maximum output voltage	V <sub>OL</sub> max (V)	0.4	0.4
Typical propagation delay from high to low	t <sub>PHL</sub> typ (μs)	0.2	0.2
Maximum propagation delay from high to low	t <sub>PHL</sub> max (μs)	1	1
Typical propagation delay from low to high	t <sub>PLH</sub> typ (μs)	0.2	0.2
Maximum propagation delay from low to high	t <sub>PLH</sub> max (µs)	1	1
Common mode transient immunity at logic low	CM <sub>L</sub> min (V/μs)	15,000	1,000
Common mode transient immunity at logic high	CM <sub>H</sub> min (V/µs)	15,000	1,000
Isolation test voltage	V <sub>ISO</sub> (V <sub>RMS</sub> )	3,750	3,750

#### PACKAGE DIMENSIONS



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## Build Vishay into your Design

SOP-5

7.4 mm

3.5 mm

For technical questions, contact optocoupleranswers@vishay.com