

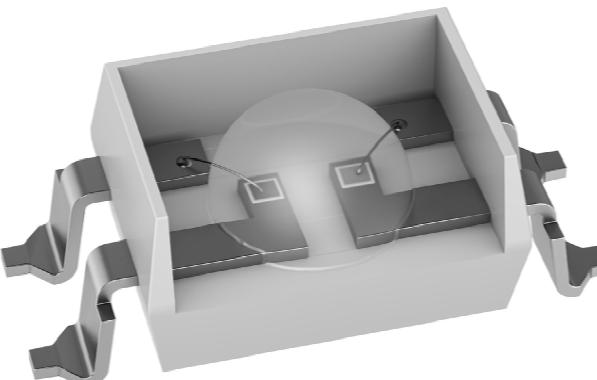
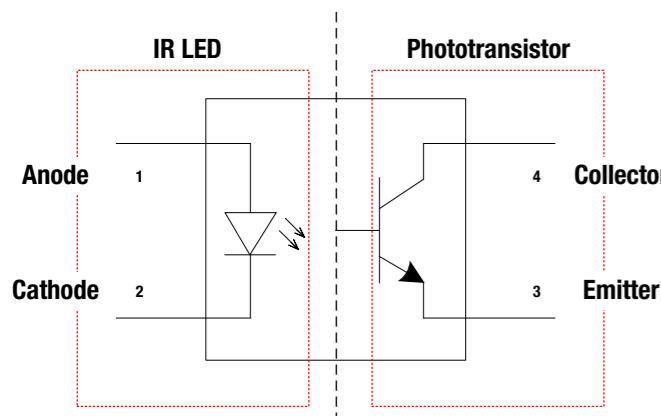
# Optocoupler Phototransistor

## Optoelectronics at glance

### Basics

#### Optocouplers - What's that?

- Transfers analogue /digital signals between two isolated circuits by using light transmission
- Optoelectronic package with infrared LED & detector
- The optical transmission takes place with an infrared light beam



#### Why Optocouplers?

- Separation of low power control circuits from high power circuits (galvanic isolation)
- Optocouplers protect your application against overvoltages
- Safety Isolation: for circuits and persons from dangerous electrical installations

#### Advantages of Coplanar Optocoupler

- Fixed Isolation Gap
- Special inner mold design to improve current transfer ratio
- Copper leadframe for high reliability
- Excellent isolation
- Compact size
- High stability of CTR in different temperature ranges

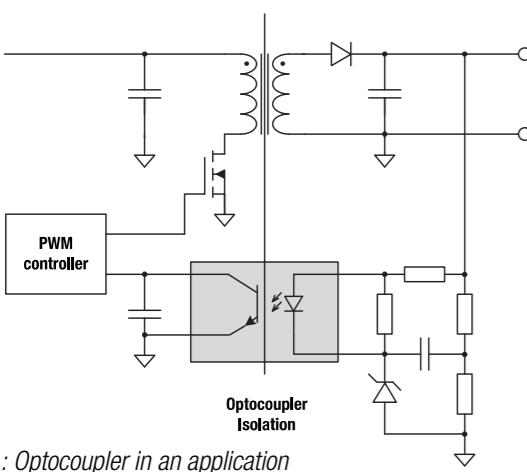


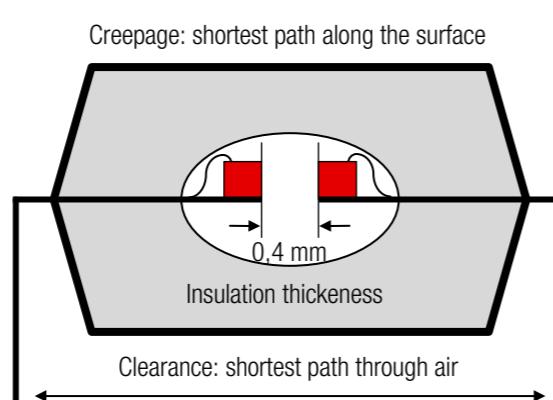
Fig.: Optocoupler in an application

#### Applications:



#### Isolation characteristics

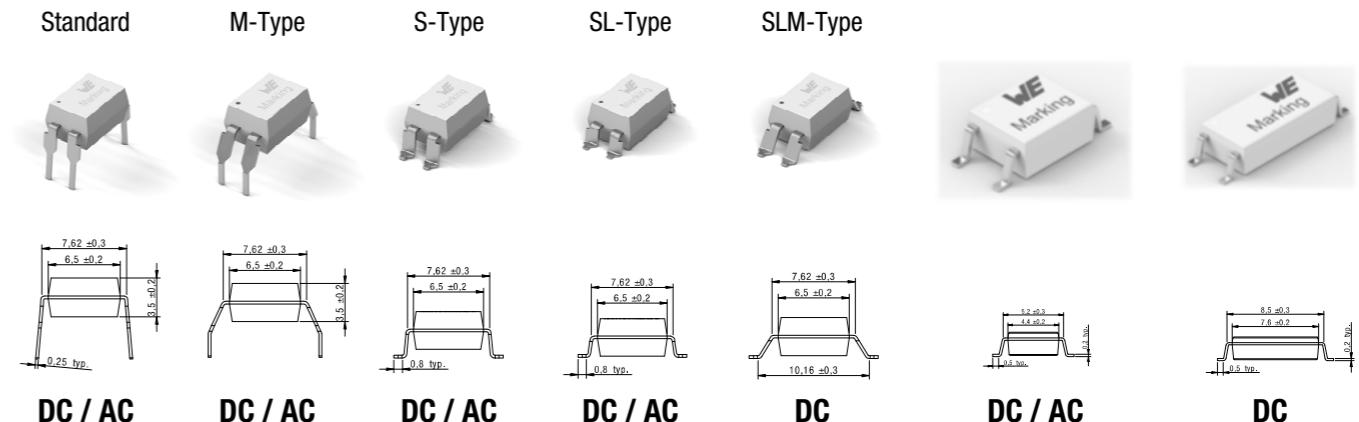
- Creepage: shortest path along the surface
- Clearance: shortest path through air
- Insulation thickness
- Maximum Isolation Voltage: 5 kV



### Choose your package and Assembly technology

#### DIP4

816 / 817 / 814



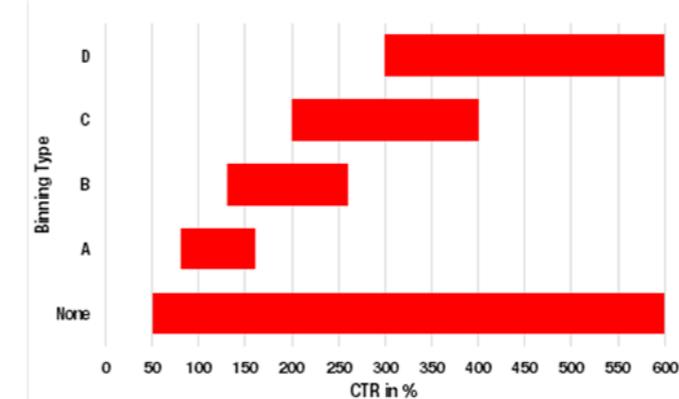
#### SOP4

354 / 356

#### LSOP4

101

Series	Schematic	Package	$V_{ISO}$ ( $V_{RMS}$ )	$V_{CE\ max}$ (V)	Test Condition CTR		$CTR_{min}$ (%)	$CTR_{max}$ (%)
					$I_F$ (mA)	$V_{CE}$ (V)		
<b>DC Optocoupler Series</b>								
816		DIP4	5000	80	5	5	50	600
817		DIP4	5000	35				
356		SOP4	3750	80				
357		SOP4	3750	35				
101		LSOP4	5000	80				
<b>AC Optocoupler Series</b>								
814		DIP4	5000	80	$\pm 1$	5	20	300
354		SOP4	3750	80				



#### Current Transfer Ratio (CTR)

- Ratio between Output and Input current given in percentage. Binning is available for every package ex stock.
- Select the part suitable for your application based on binning type (CTR). A higher CTR results in a greater delay between input and output.



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