

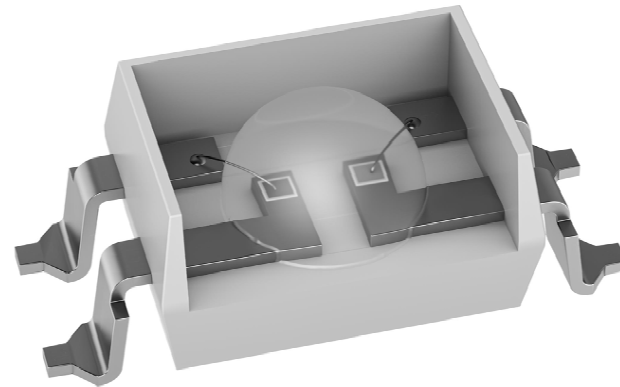
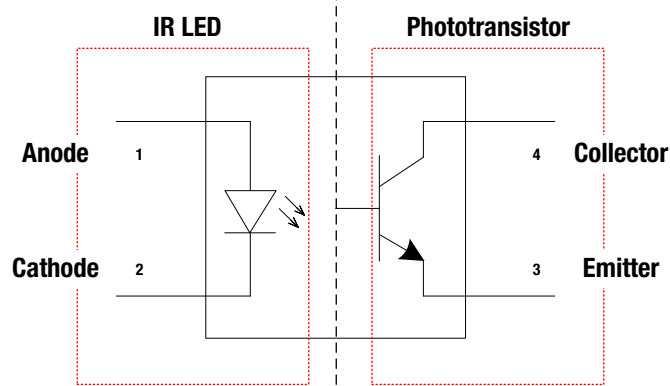
Optocoupler Phototransistor

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

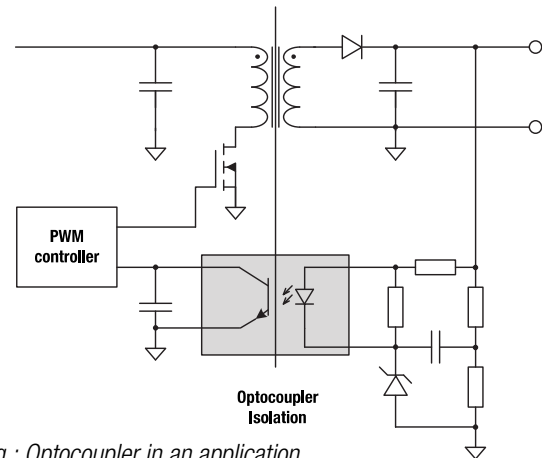


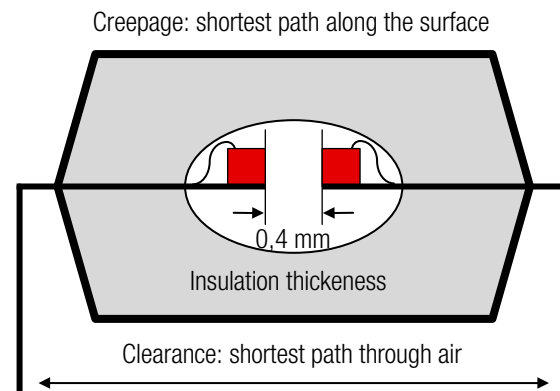
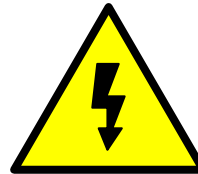
Fig.: Optocoupler in an application

Applications:



Isolation characteristics

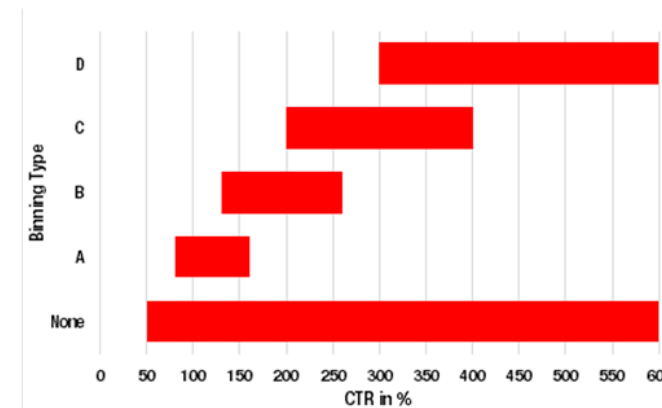
- Creepage: shortest path along the surface
- Clearance: shortest path through air
- Insulation thickness
- Maximum Isolation Voltage: 5 kV



Choose your package and Assembly technology

DIP4 816 / 817 / 814					SOP4 354 / 356	LSOP4 101
Standard	M-Type	S-Type	SL-Type	SLM-Type		
DC / AC	DC / AC	DC / AC	DC / AC	DC	DC / AC	DC

Series	Schematic	Package	V _{ISO} (V _{RMS})	V _{CE max} (V)	Test Condition CTR		CTR _{min} (%)	CTR _{max} (%)
					I _F (mA)	V _{CE} (V)		
DC Optocoupler Series								
816		DIP4	5000	80	5	5	50	600
817		DIP4	5000	35				
356		SOP4	3750	80				
357		SOP4	3750	35				
101	LSOP4	5000	80					
AC Optocoupler Series								
814		DIP4	5000	80	±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.



Compare Optocouplers in REDEXPERT
www.we-online.com/redexpert-optocouplers

