

Single Channel

Part Number	Features	Isolation Voltage	T _{OP}	V _{CC}	V _O	I _B	Current Transfer Ratio	V _{OL}	t _{PLH} , t _{PHL}	CM _H	CM _L
		Min (KV _{RMS})	(°C)	Max (V)	Max (V)	Max (mA)	V _{CC} = 4.5V I _F = 16mA V _O = 0.4V Min (%)	V _{CC} = 4.5V I _F = 16mA I _O = 1.1mA Max (V)	V _{CC} = 5V I _F = 16mA R _L = 4.1kΩ Max (μs)	V _{CC} = 5V I _F = 0mA V _{OH} = 2V R _L = 4.1kΩ V _{CM} = 10Vp-p Min (V/μs)	V _{CC} = 5V I _F = 16mA V _{OL} = 0.8V R _L = 4.1kΩ V _{CM} = 10Vp-p Min (V/μs)
6N135	Single Channel Optocoupler with a High Speed Photo Detector Transistor Output	5	-55 - 100	30	20	5	7-50	0.4	1.5	1000	1000
6N136							19-50	0.4	0.8	1000	1000
ICPL4502											
ICPL4503							15000	15000			
									R _L = 1.9kΩ V _{CM} = 1500Vp-p	R _L = 1.9kΩ V _{CM} = 1500Vp-p	

Note 1 : V_{CC} is recommended to be bypassed by a 0.1μF capacitor

Half Pitch Single Channel

Part Number	Features	Isolation Voltage	T _{OP}	V _{CC}	V _O	I _B	Current Transfer Ratio	V _{OL}	t _{PLH} , t _{PHL}	CM _H	CM _L
		Min (KV _{RMS})	(°C)	Max (V)	Max (V)	Max (mA)	V _{CC} = 4.5V I _F = 16mA V _O = 0.4V Min (%)	V _{CC} = 4.5V I _F = 16mA I _O = 1.1mA Max (V)	V _{CC} = 5V I _F = 16mA R _L = 4.1kΩ Max (μs)	V _{CC} = 5V I _F = 0mA V _{OH} = 2V R _L = 4.1kΩ V _{CM} = 10Vp-p Min (V/μs)	V _{CC} = 5V I _F = 16mA V _{OL} = 0.8V R _L = 4.1kΩ V _{CM} = 10Vp-p Min (V/μs)
ICPL0500	Single Channel Optocoupler with a High Speed Photo Detector Transistor Output	3.75	-55 - 100	30	20	5	7-50	0.4	1.5	1000 Typical	1000 Typical
ICPL0501							19-50	0.4	0.8	1000 Typical	1000 Typical
ICPL0452											
ICPL0453							15000	15000			
									R _L = 1.9kΩ V _{CM} = 1500Vp-p	R _L = 1.9kΩ V _{CM} = 1500Vp-p	

Note 1 : V_{CC} is recommended to be bypassed by a 0.1μF capacitor

Dual Channel

Part Number	Features	Isolation Voltage	T _{OP}	V _{CC}	V _O	I _B	Current Transfer Ratio	V _{OL}	t _{PLH} , t _{PHL}	CM _H	CM _L
		Min (KV _{RMS})	(°C)	Max (V)	Max (V)	Max (mA)	V _{CC} = 4.5V I _F = 16mA V _O = 0.4V Min (%)	V _{CC} = 4.5V I _F = 16mA I _O = 1.1mA Max (V)	V _{CC} = 5V I _F = 16mA R _L = 4.1kΩ Max (μs)	V _{CC} = 5V I _F = 0mA V _{OH} = 2V R _L = 4.1kΩ V _{CM} = 10Vp-p Min (V/μs)	V _{CC} = 5V I _F = 16mA V _{OL} = 0.8V R _L = 4.1kΩ V _{CM} = 10Vp-p Min (V/μs)
ICPL2530	Dual Channel Optocoupler with a High Speed Photo Detector Transistor Output	5	-40 - 100	30	20	No Connection	7-50	0.5	1.5	1000	1000
ICPL2531							19-50	0.5	0.8	1000	1000
										R _L = 1.9kΩ V _{CM} = 1000Vp-p	R _L = 1.9kΩ V _{CM} = 1000Vp-p

Note 1 : V_{CC} is recommended to be bypassed by a 0.1μF capacitor

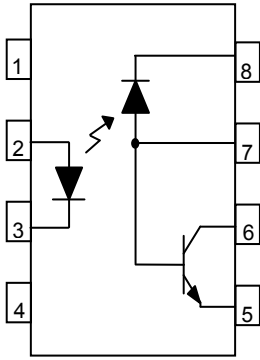
Half Pitch Dual Channel

Part Number	Features	Isolation Voltage	T _{OP}	V _{CC}	V _O	I _B	Current Transfer Ratio	V _{OL}	t _{PLH} , t _{PHL}	CM _H	CM _L
		Min (KV _{RMS})	(°C)	Max (V)	Max (V)	Max (mA)	V _{CC} = 4.5V I _F = 16mA V _O = 0.4V Min (%)	V _{CC} = 4.5V I _F = 16mA I _O = 1.1mA Max (V)	V _{CC} = 5V I _F = 16mA R _L = 4.1kΩ Max (μs)	V _{CC} = 5V I _F = 0mA V _{OH} = 2V R _L = 4.1kΩ V _{CM} = 10Vp-p Min (V/μs)	V _{CC} = 5V I _F = 16mA V _{OL} = 0.8V R _L = 4.1kΩ V _{CM} = 10Vp-p Min (V/μs)
ICPL0530	Dual Channel Optocoupler with a High Speed Photo Detector Transistor Output	3.75	-55 - 100	30	20	No Connection	7-50	0.4	1.5	1000	1000
ICPL0531							19-50	0.4	0.8	1000	1000
										R _L = 1.9kΩ V _{CM} = 1500Vp-p	R _L = 1.9kΩ V _{CM} = 1500Vp-p

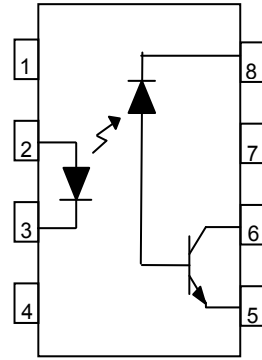
Note 1 : V_{CC} is recommended to be bypassed by a 0.1μF capacitor

1Mbps/s High Speed Optocouplers

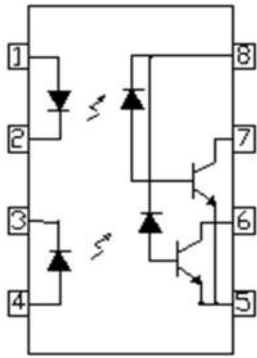
1Mbps Single Channel (Base Accessible)



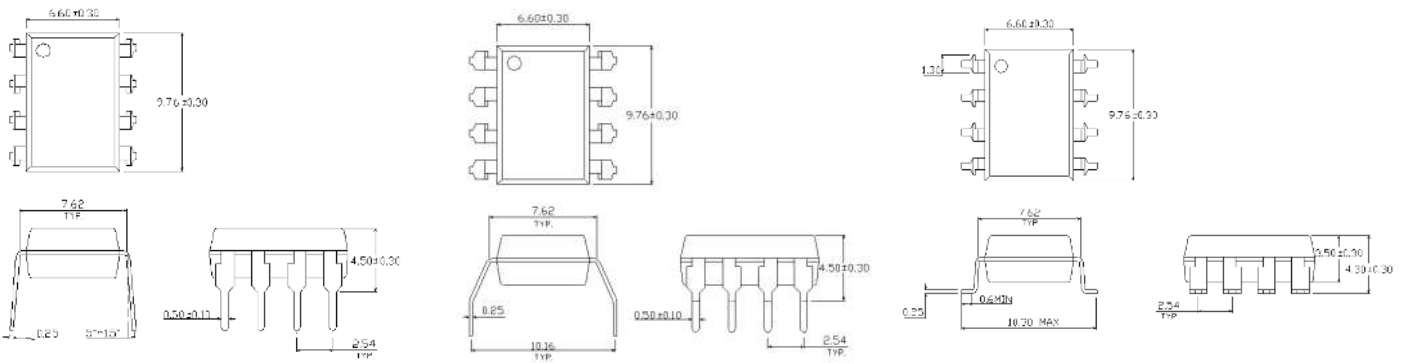
1Mbps Single Channel



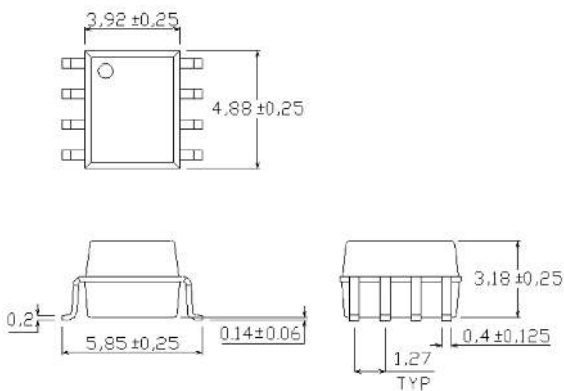
1Mbps Dual Channel



Standard Packages



Half Pitch Package



10Mbits/s High Speed Optocouplers

Single Channel

Part Number	Features	Isolation Voltage	T _{OP}	V _{CC}	V _O	V _E	I _{FT}	V _{EH}	V _{EL}	V _{OL}	t _{PHL} , t _{PLH}	CM _H	CM _L
							V _{CC} = 5.5V V _E = 2.0V V _O = 0.6V I _{OL} = 13mA	V _{CC} = 5.5V I _F = 10mA	V _{CC} = 5.5V I _F = 10mA	V _{CC} = 5.5V V _E = 2.0V I _F = 5mA I _O = 13mA	V _{CC} = 5V I _F = 7.5mA R _L = 350Ω C _L = 15pF	I _F = 0mA V _{OH} = 2V R _L = 350Ω V _{CM} = 10Vp-p	I _F = 7.5mA V _{OL} = 0.8V R _L = 350Ω V _{CM} = 10Vp-p
		Min (KV _{RMS})	(°C)	Max (V)	Max (V)	Max (V)	Max (mA)	Min (V)	Max (V)	Max (V)	Max (ns)	Min (V/μs)	Min (V/μs)
6N137	Single Channel Optocoupler with a High Speed Integrated Photo Detector Logic Gate Strobable Output	5	-40 - 85	7.0 Note 1	7.0	5.5 Note 2	5	2.0	0.8	0.6	75	5000 Ref	5000 Ref
ICPL2601												5000 V _{CM} = 50Vp-p	5000 V _{CM} = 50Vp-p
ICPL2611												10000 V _{CM} = 400Vp-p	10000 V _{CM} = 400Vp-p

Note 1 : V_{CC} must be bypassed by a minimum 0.1μF capacitor

Note 2 : V_E = Max 0.5V above V_{CC}

Half Pitch Single Channel

Part Number	Features	Isolation Voltage	T _{OP}	V _{CC}	V _O	V _E	I _{FT}	V _{EH}	V _{EL}	V _{OL}	t _{PHL} , t _{PLH}	CM _H	CM _L
							V _{CC} = 5.5V V _E = 2.0V V _O = 0.6V I _{OL} = 13mA	V _{CC} = 5.5V I _F = 10mA	V _{CC} = 5.5V I _F = 10mA	V _{CC} = 5.5V V _E = 2.0V I _F = 5mA I _O = 13mA	V _{CC} = 5V I _F = 7.5mA R _L = 350Ω C _L = 15pF	I _F = 0mA V _{OH} = 2V R _L = 350Ω V _{CM} = 10Vp-p	I _F = 7.5mA V _{OL} = 0.8V R _L = 350Ω V _{CM} = 10Vp-p
		Min (KV _{RMS})	(°C)	Max (V)	Max (V)	Max (V)	Max (mA)	Min (V)	Max (V)	Max (V)	Max (ns)	Min (V/μs)	Min (V/μs)
ICPL0600	Single Channel Optocoupler with a High Speed Integrated Photo Detector Logic Gate Strobable Output	3.75	-40 - 100	7.0 Note 1	7.0	5.5 Note 2	5	2.0	0.8	0.6	75	1000 Ref	1000 Ref
ICPL0601												5000 V _{CM} = 50Vp-p	5000 V _{CM} = 50Vp-p
ICPL0611												10000 V _{CM} = 400Vp-p	10000 V _{CM} = 400Vp-p

Note 1 : V_{CC} must be bypassed by a minimum 0.1μF capacitor

Note 2 : V_E = Max 0.5V above V_{CC}

5 Pin Half Pitch Single Channel

Part Number	Features	Isolation Voltage	T _{OP}	V _{CC}	V _O	V _E	I _{FT}	V _{OL}	t _{PHL} , t _{PLH}	CM _H	CM _L
							V _{CC} = 5.5V V _O = 0.6V I _{OL} = 13mA	V _{CC} = 5.5V I _F = 5mA I _O = 13mA	V _{CC} = 5V I _F = 7.5mA R _L = 350Ω C _L = 15pF	I _F = 0mA V _{OH} = 2V R _L = 350Ω V _{CM} = 10Vp-p	I _F = 7.5mA V _{OL} = 0.8V R _L = 350Ω V _{CM} = 10Vp-p
		Min (KV _{RMS})	(°C)	Max (V)	Max (V)	Max (V)	Max (mA)	Max (V)	Max (ns)	Min (V/μs)	Min (V/μs)
ICPLM600	Dual Channel Optocoupler with a High Speed Integrated Photo Detector Logic Gate Output	3750	-40 - 85	7.0 Note 1	7.0	No Connection	5	0.6	100	1000 Ref	1000 Ref
ICPLM601										5000 V _{CM} = 50Vp-p	5000 V _{CM} = 50Vp-p
ICPLM611										20000 V _{CM} = 1kVp-p	20000 V _{CM} = 1kVp-p

Note 1 : V_{CC} must be bypassed by a minimum 0.1μF capacitor

10Mbits/s High Speed Optocouplers

Dual Channel

Part Number	Features	Isolation Voltage	T _{OP}	V _{CC}	V _O	V _E	I _{FT}	V _{OL}	t _{PHL} , t _{PLH}	CM _H	CM _L
							Max (mA)	Max (V)	Max (ns)	Min (V/μs)	Min (V/μs)
		Min (KV _{RMS})	(°C)	Max (V)	Max (V)	Max (V)	V _{CC} = 5.5V V _O = 0.6V I _{OL} = 13mA	V _{CC} = 5.5V I _F = 5mA I _O = 13mA	V _{CC} = 5V I _F = 7.5mA R _L = 350Ω C _L = 15pF	I _F = 0mA V _{OH} = 2V R _L = 350Ω V _{CM} = 1kVp-p	I _F = 7.5mA V _{OL} = 0.8V R _L = 350Ω V _{CM} = 1kVp-p
ICPL2630	Dual Channel Optocoupler with a High Speed Integrated Photo Detector Logic Gate	5	-40 - 100	7.0	7.0	No Connection	5	0.6	100	5000	5000
ICPL2631				Note 1						10000	10000

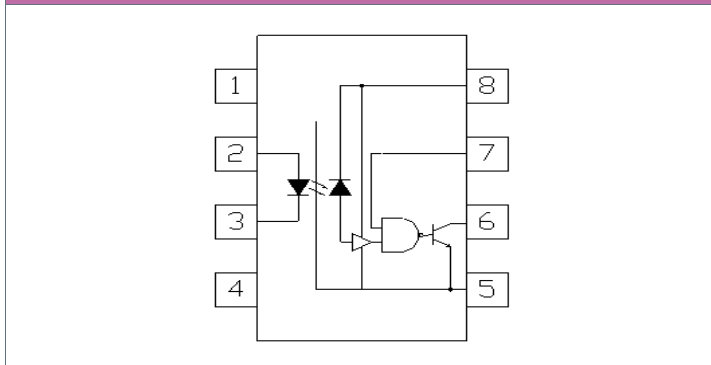
Note 1 : V_{CC} must be bypassed by a minimum 0.1μF capacitor

Half Pitch Dual Channel

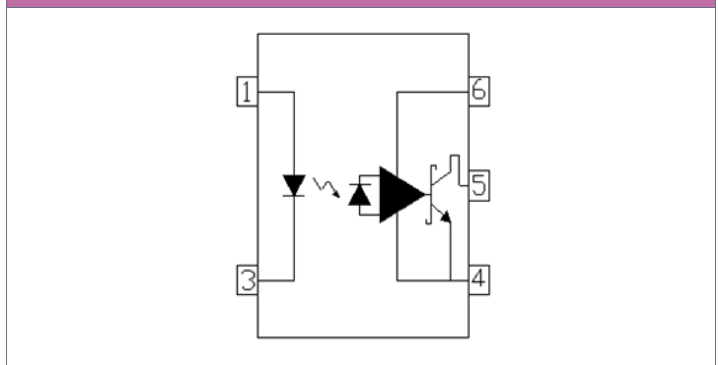
Part Number	Features	Isolation Voltage	T _{OP}	V _{CC}	V _O	V _E	I _{FT}	V _{OL}	t _{PHL} , t _{PLH}	CM _H	CM _L
							Max (mA)	Max (V)	Max (ns)	Min (V/μs)	Min (V/μs)
		Min (KV _{RMS})	(°C)	Max (V)	Max (V)	Max (V)	V _{CC} = 5.5V V _O = 0.6V I _{OL} = 13mA	V _{CC} = 5.5V I _F = 5mA I _O = 13mA	V _{CC} = 5V I _F = 7.5mA R _L = 350Ω C _L = 15pF	I _F = 0mA V _{OH} = 2V R _L = 350Ω V _{CM} = 1kVp-p	I _F = 7.5mA V _{OL} = 0.8V R _L = 350Ω V _{CM} = 10Vp-p
ICPL0630	Single Channel Optocoupler with a High Speed Integrated Photo Detector Logic Gate	3.75	-40 - 100	7.0	7.0	No Connection	5	0.6	100	5000	5000
ICPL0631				Note 1						10000	10000

Note 1 : V_{CC} must be bypassed by a minimum 0.1μF capacitor

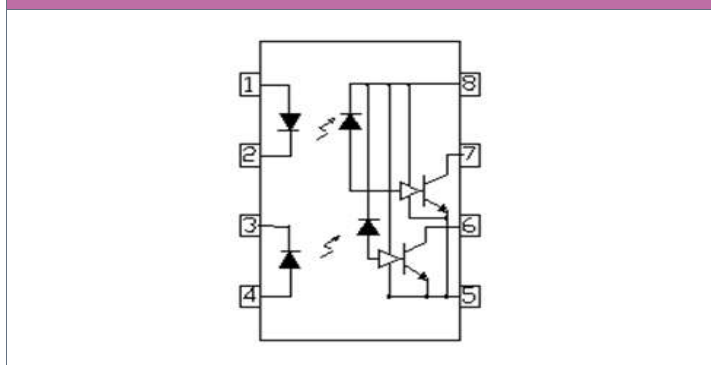
Single Channel



5 Pin Half Pitch Single Channel

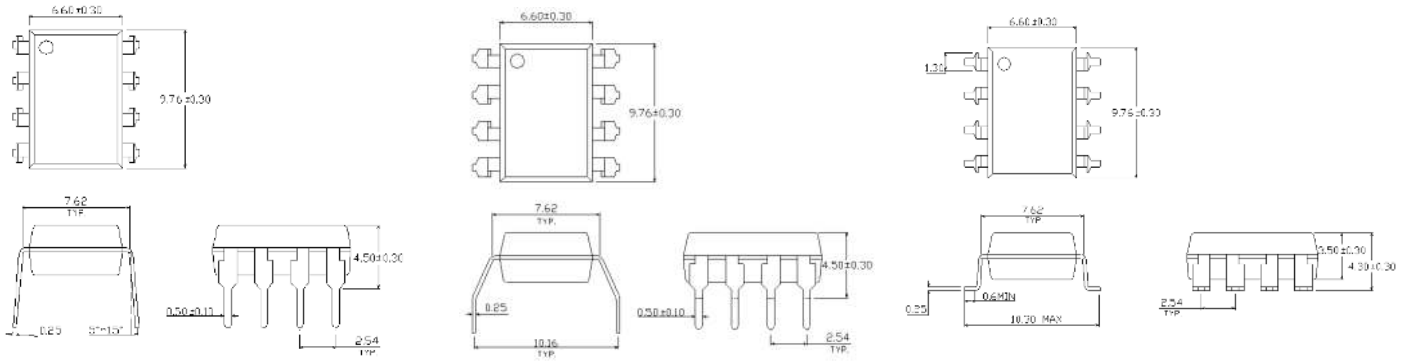


Dual Channel

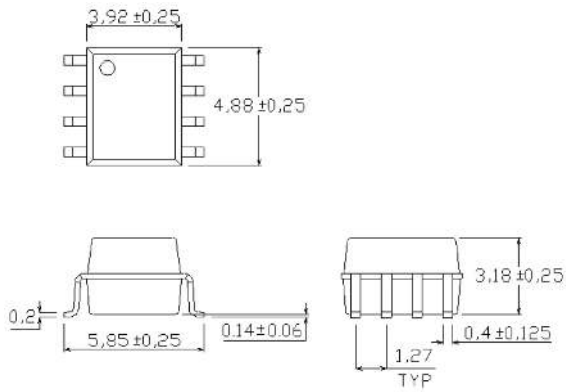


10Mbits/s High Speed Optocouplers

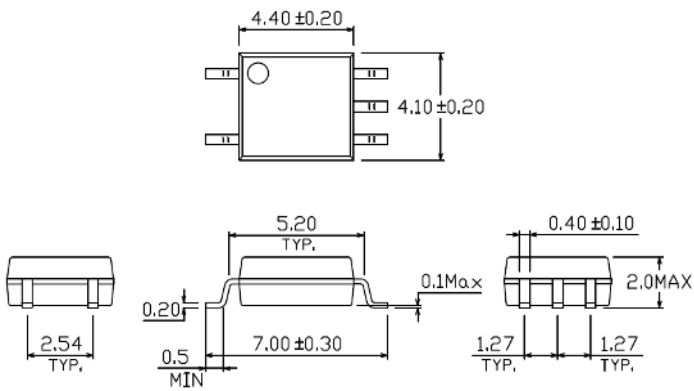
Standard Packages



Half Pitch Package



5 Pin Half Pitch Package



High Speed Split Darlington Optocoupler

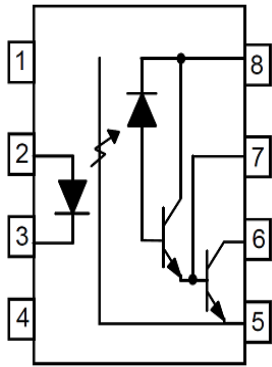
Single Channel

Part Number	Features	Isolation Voltage	T _{OP}	V _{CC}	V _O	V _{ER}	Current Transfer Ratio	V _{OL}	t _{PLH}	t _{PHL}	CM _H	CM _L
		Min (KV _{RMS})	(°C)	Max (V)	Max (V)	Max (V)	V _{CC} = 4.5V I _F = 1.6mA V _O = 0.4V Min (%)	V _{CC} = 4.5V I _F = 1.6mA I _O = 4.8mA Max (V)	V _{CC} = 5V I _F = 1.6mA R _L = 2.2kΩ Max (μs)	V _{CC} = 5V I _F = 1.6mA R _L = 2.2kΩ Max (us)	V _{CC} = 5V I _F = 0mA V _{OH} = 2V R _L = 2.2kΩ V _{CM} = 10Vp-p Min (V/μs)	V _{CC} = 5V I _F = 1.6mA V _{OL} = 0.8V R _L = 2.2Ω V _{CM} = 10Vp-p Min (V/μs)
6N138	Single Channel Optocoupler with a High Speed High Gain Split Darlington Transistor Output	5	-55 - 85	7	7	0.5	300	0.4	35	10	1000	1000
6N139				Note 1	Note 2	500	0.4	7	1	1000	1000	
				18	18			I _O = 8mA	I _F = 12mA R _L = 270Ω	I _F = 12mA R _L = 270Ω		

Note 1 : V_{CC} is recommended to be bypassed by a 0.1μF capacitor

Note 2 : V_{ER} = Emitter to Base Reverse Voltage

High Speed Split Darlington



Standard Packages

