

Optoisolation and Optical Sensor Products



Selection Guide 6th Edition

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- ◀ Battery Operated Vehicle
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Hermetical

Commercial Part Number	Class H
HCPL-5760	HCPL-7

*DSCC SMD number doe

Hermetical

Commercial Part Number	Class H
HSSR-7110	HSSR-71
-	HSSR-71

*DSCC SMD number doe

Hermetical

Commercial Part Number	Class H
HCPL-7850	HCPL-7

*DSCC SMD number doe

Hermetical

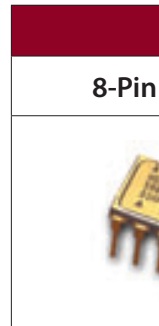
Commercial Part Number	Class H
HCPL-5300	HCPL-5

*DSCC SMD number doe

Hermetical

Commercial Part Number	Class H
HCPL-5120	HCPL-5
HCPL-5150	HCPL-5

*DSCC SMD number doe



Hermetic Opti
100 = Butt Cut
200 = Solder D
300 = Gull Win
600 = Crew Cu

Plastic Optocouplers

Multi-Channel Bi-Directional Digital Optocoupler Product Selection

Part No.	Package	Channel	Forward Direction	Reverse Direction	I _{F(on)} mA Min.	t _{PLH} ns Max.	t _{PLH} ns Max.	PWD ns Max.	t _{PSK} ns Max.	V _{CC} V Min.	V _{CC} V Max.	CMR - V/μs@V _{CM}		V _{ISO} V _{RMS} Min.	V _{FORM} V peak
												CMR V/μs (Min.)	V _{CM} V		
ACSL-6210-00RE	S08	2	1	1	7	100	100	35	40	3	5.5	10000	1000	2500	560*
ACSL-6400-00TE	S016	4	4	0	7	100	100	35	40	3	5.5	10000	1000	2500	560*
ACSL-6410-00TE	S016	4	3	1	7	100	100	35	40	3	5.5	10000	1000	2500	560*
ACSL-6420-00TE	S016	4	2	2	7	100	100	35	40	3	5.5	10000	1000	2500	560*
ACSL-6310-00TE	S016	3	2	1	7	100	100	35	40	3	5.5	10000	1000	2500	560*
ACSL-6300-00TE	S016	3	3	0	7	100	100	35	40	3	5.5	10000	1000	2500	560*

Notes: * - with IEC/EN/DIN EN 60747-5-2/5 Option 060.

High Speed Digital CMOS Logic Gate Optocoupler Product Selection

Part No.	Package	V _{DD} V/S	I _{F(on)} mA Min.	Max Data Rate MBd Min.	t _{PLH} ns Max.	t _{PHL} ns Max.	PWD ns Max.	t _{PSK} ns Max.	V _{CC} V Min.	V _{CC} V Max.	CMR - V/μs@V _{CM}		V _{ISO} V _{RMS} Min.	V _{FORM} V peak
											CMR V/μs (Min.)	V _{CM} V		
Single Channel CMOS Input														
ACPL-M71T-000E R ² Coupler	S05	5	10	12.5	35	35	8	20	15000	1000	3750	560*		
ACPL-M72T-000E R ² Coupler	S05	5	3.5	10	100	100	50	60	25000	1000	3750	560*		
HCPL-0710	S08	5	—	12.5	40	40	8	20	10000	1000	3750	560*		
HCPL-0720	S08	5	—	25	40	40	8	20	10000	1000	3750	560*		
HCPL-0721	S08	5	—	25	40	40	6	20	10000	1000	3750	560*		
HCPL-0723	S08	5	—	50	22	22	2	16	10000	1000	3750	560*		
HCPL-7710	300 mil DIP8	5	—	12.5	40	40	8	20	10000	1000	3750/5000 [#]	630*		
HCPL-7721	300 mil DIP8	5	—	25	40	40	6	20	10000	1000	3750/5000 [#]	630*		
HCPL-7720	300 mil DIP8	5	—	25	40	40	8	20	10000	1000	3750/5000 [#]	630*		
HCPL-7723	300 mil DIP8	5	—	50	22	22	2	16	10000	1000	3750/5000 [#]	630*		
LED Input														
HCPL-0708	S08	5	10	15	60	60	30	40	10000	1000	3750	560*		
Dual Channel LED Input														
HCPL-0738	S08	5	10	15	60	60	30	40	10000	1000	3750	560*		

Notes: * - with IEC/EN/DIN EN 60747-5-2/5 Option 060, # - with UL5000V_{RMS}/1 minute Option 020

3.3V/5V Family (15/25 MBd High Speed Digital CMOS Optocoupler) Product Selection

Part No.	Package	V _{DD} V	I _{F(on)} mA Min.	Max Data Rate MBd Min.	t _{PLH} ns Max.	t _{PHL} ns Max.	PWD ns Max.	t _{PSK} ns Max.	V _{CC} V Min.	V _{CC} V Max.	CMR - V/μs@V _{CM}		V _{ISO} V _{RMS} Min.	V _{FORM} V peak
											CMR V/μs (Min.)	V _{CM} V		
Single Channel CMOS Input														
ACPL-072L-000E	S08	3.3/5	—	25	40	40	6	20	10000	1000	3750	560*		
ACPL-772L-000E	300 mil DIP8	3.3/5	—	25	40	40	6	20	10000	1000	3750/5000 [#]	630*		
Single Channel LED Input														
ACPL-071L-000E	S08	3.3/5	9	15	40	40	25	30	10000	1000	3750	560*		
ACPL-M75L-000E	S05	3.3/5	4	15	55	55	25	40	10000	1000	3750	560*		
ACPL-W70L-000E	Stretched S06	3.3/5	4	15	55	55	25	40	10000	1000	5000	1140*		
Dual Channel LED Input														
ACPL-074L-000E	S08	3.3/5	9	15	40	40	25	30	10000	1000	3750	560*		
ACPL-K73L-000E	Stretched S08	3.3/5	4	15	55	55	25	40	10000	1000	5000	1140*		










Notes: * - with IEC/EN/DIN EN 60747-5-2/5 Option 060, # - with UL 5000V_{RMS}/1 minute Option 020, ^ - Advanced Information, may subject to changes.

20 MBd Logic Gate Optocoupler Product Selection

Part No.	Package	I _{F(on)} mA Min.	t _{PLH} ns Max.	t _{PHL} ns Max.	PWD ns Max.	t _{PSK} ns Max.	CMR - V/μs@V _{CM}		V _{ISO} V _{RMS} Min.	V _{JORM} V peak
							CMR V/μs (Min.)	V _{CM} V		
Single Channel										
HCPL-2400	300 mil DIP8	4	60	60	25	35	1000	300	3750	630*
Dual Channel										
HCPL-2430	300 mil DIP8	4	60	60	25	35	1000	300	3750	630*

Notes: * - with IEC/EN/DIN EN 60747-5-2/5 Option 06g

10 MBd Logic Gate Optocoupler Product Selection

Part No.	Package	V _{DD} V	I _{F(on)} mA Min.	t _{PLH} ns Max.	t _{PHL} ns Max.	PWD ns Max.	t _{PSK} ns Max.	CMR - V/μs@V _{CM}		V _{ISO} V _{RMS} Min.	V _{JORM} V peak
								CMR V/μs (Min.)	V _{CM} V		
Single Channel											
6N137	300 mil DIP8	5	5	100	100	35	40	1000	10	3750/5000 [#]	630*
ACNV260E-000E [^]	 500 mil DIP	5	5	100	100	40	40	20000	1500	5000	ATEX Certified (375V)
ACNV2601-000E [^]	 500 mil DIP	5	5	100	100	40	40	20000	1500	7500	1768
ACPL-M60L-000E	 S05	3.3/5	5	90	75	25	40	15000	1000	3750	560*
ACPL-M61T-000E R ² Coupler	 S05	5	5	100	100	35	40	15000	1000	3750	560*
ACPL-M61U-000E R ² Coupler	 S05	5	5	100	100	35	40	15000	1000	3750	560*
ACPL-P611-000E	 Stretched S06	5	5	100	100	35	40	10000	1000	5000	891*
ACPL-W60L-000E	 Stretched S06	3.3/5	5	90	75	25	40	15000	1000	5000	1140*
ACPL-W611-000E	 Stretched S06	5	5	100	100	35	40	10000	1000	5000	1140*
HCNW137	400 mil DIP8	5	5	100	100	40	40	5000	1000	5000	1414
HCNW2601	400 mil DIP8	5	5	100	100	40	40	10000	1000	5000	1414
HCNW2611	400 mil DIP8	5	5	100	100	40	40	15000	1000	5000	1414
HCPL-060L	S08	3.3/5	5	90	75	25	40	15000	1000	3750	560*
HCPL-061A	S08	5	3	100	100	45	60	1000	50	3750	560*
HCPL-061N	S08	5	3	100	100	45	60	1000	1000	3750	560*
HCPL-260L	300 mil DIP8	3.3/5	5	90	75	25	40	15000	1000	3750/5000 [#]	630*
HCPL-261A	300 mil DIP8	5	3	100	100	45	60	1000	50	3750/5000 [#]	630*
HCPL-261N	300 mil DIP8	5	3	100	100	45	60	1000	1000	3750/5000 [#]	630*
HCPL-0600	S08	5	5	100	100	35	40	5000	1000	3750	560*
HCPL-0601	S08	5	5	100	100	35	40	15000	1000	3750	560*
HCPL-0611	S08	5	5	100	100	35	40	15000	1000	3750	560*
HCPL-2601	300 mil DIP8	5	5	100	100	35	40	10000	1000	3750/5000 [#]	630*
HCPL-2611	300 mil DIP8	5	5	100	100	35	40	15000	1000	3750/5000 [#]	630*
HCPL-7601	300 mil DIP8	5	2	100	120	55	75	1000	50	3750/5000 [#]	630*
HCPL-7611	300 mil DIP8	5	2	100	120	55	75	10000	1000	3750/5000 [#]	630*
HCPL-M600	S05	5	5	100	100	35	40	—	—	3750	—
HCPL-M601	S05	5	5	100	100	35	40	5000	50	3750	—
HCPL-M611	S05	5	5	100	100	35	40	10000	1000	3750	—
Dual Channel											
ACPL-K63L-000E	 Stretched S08	3.3/5	5	90	75	25	40	15000	1000	5000	1140*
HCPL-063A	S08	5	3	100	100	45	60	1000	50	3750	560*
HCPL-063L	S08	3.3/5	5	90	75	25	40	15000	1000	3750	560*
HCPL-063N	S08	5	3	100	100	45	60	15000	1000	3750	560*
HCPL-0630	S08	5	5	100	100	35	40	5000	1000	3750	560*
HCPL-0631	S08	5	5	100	100	35	40	10000	1000	3750	560*
HCPL-0661	S08	5	5	100	100	35	40	15000	1000	3750	560*
HCPL-263A	300 mil DIP8	5	3	100	100	45	60	1000	50	3750/5000 [#]	630*
HCPL-263L	300 mil DIP8	3.3/5	5	90	75	25	40	15000	1000	3750/5000 [#]	630*
HCPL-263N	300 mil DIP8	5	3	100	100	45	60	15000	1000	3750/5000 [#]	630*
HCPL-2630	300 mil DIP8	5	5	100	100	35	40	5000	1000	3750/5000 [#]	630*
HCPL-2631	300 mil DIP8	5	5	100	100	35	40	10000	1000	3750/5000 [#]	630*
HCPL-4661	300 mil DIP8	5	5	100	100	35	40	15000	1000	3750/5000 [#]	630*

Notes: * - with IEC/EN/DIN EN 60747-5-2/5 Option 06g, [#] - with UL 5000V_{RMS}/1 minute Option 02g, [^] - Advanced information, may subject to changes.

3.3V/5V Family (10 MBd CMOS Optocoupler) Product Selection

Part No.	Package	V _{DD} V	I _{F(on)} mA Min.	Max Data Rate MBd Min.	t _{PLH} ns Max.	t _{PHL} ns Max.	PWD ns Max.	t _{PSK} ns Max.	CMR - V/μs@V _{CM}		V _{ISO} V _{RMS} Min.	V _{IORM} V peak
									CMR V/μs (Min.)	V _{CM} V		
Single Channel LED Input												
ACPL-061L-000E [^]	S08	3.3/5	1.6	10	80	80	30	30	20000	1000	3750	560*
ACPL-M61L-000E [^]	S05	3.3/5	1.6	10	80	80	30	30	20000	1000	3750	560*
ACPL-W61L-000E [^]	Stretched S06	3.3/5	1.6	10	80	80	30	30	20000	1000	5000	1140*
Dual Channel LED Input												
ACPL-064L-000E [^]	S08	3.3/5	1.6	10	80	80	30	30	20000	1000	3750	560*
ACPL-K64L-000E [^]	Stretched S08	3.3/5	1.6	10	80	80	30	30	20000	1000	5000	1140*

Notes: * - with IEC/EN/DIN EN 60747-5-2/5 Option 060, # - with UL 5000V_{RMS}/1 minute Option 020, ^ - Advanced Information, may subject to changes.

8 MBd Logic Gate Optocoupler Product Selection

Part No.	Package	I _{F(on)} mA Min.	t _{PLH} μs Max.	t _{PHL} μs Max.	CMR - V/μs@V _{CM}		V _{ISO} V _{RMS} Min.	V _{IORM} V peak
					CMR V/μs (Min.)	V _{CM} V		
Single Channel								
HCPL-0300	S08	0.5	0.16	0.2	100	50	3750	—
HCPL-2300	300 mil DIP8	0.5	0.16	0.2	100	50	3750	630*

Notes: * - with IEC/EN/DIN EN 60747-5-2/5 Option 060

5 MBd Logic Gate Optocoupler Product Selection

Part No.	Package	I _{F(on)} mA Min.	t _{PLH} μs Max.	t _{PHL} μs Max.	CMR - V/μs@V _{CM}		V _{ISO} V _{RMS} Min.	V _{IORM} V peak
					CMR V/μs (Min.)	V _{CM} V		
Single Channel								
HCNW2201	400 mil DIP8	1.6	0.3	0.3	1000	50	5000	1414
HCNW2211	400 mil DIP8	1.6	0.3	0.3	10000	1000	5000	1414
HCPL-0201	S08	1.6	0.3	0.3	1000	50	3750	560*
HCPL-0211	S08	1.6	0.3	0.3	10000	1000	3750	560*
HCPL-2200	300 mil DIP8	1.6	0.3	0.3	1000	50	3750	630*
HCPL-2201	300 mil DIP8	1.6	0.3	0.3	1000	50	3750	630*
HCPL-2202	300 mil DIP8	1.6	0.3	0.3	1000	50	3750	630*
HCPL-2211	300 mil DIP8	1.6	0.3	0.3	10000	1000	3750	630*
HCPL-2212	300 mil DIP8	1.6	0.3	0.3	10000	1000	3750	630*
HCPL-2219	300 mil DIP8	1.6	0.3	0.3	2500	400	3750	630*
Dual Channel								
HCPL-2231	300 mil DIP8	1.8	0.3	0.3	1000	50	3750	—
HCPL-2232	300 mil DIP8	1.8	0.3	0.3	10000	1000	3750	—

Notes: * - with IEC/EN/DIN EN 60747-5-2/5 Option 060

1 Mbd Transistor Output Optocoupler Product Selection

Part No.	Package	V _{DD} V	I _{F(on)} mA Min.	CTR			t _{PLH} μs Max.	t _{PHL} μs Max.	CMR - V/μs@V _{CM}		V _{ISO} V _{RMS} Min.	V _{ORM} V peak
				% Min.	% Max.	I _F mA			CMR V/μs (Min.)	V _{CM} V		
Single Channel												
ACPL-M50L-000E NEW	S05	3.3/5	3	80	200	3	1.0	1.0	15000	1000	3750	560*
6N135	300 mil DIP8	5	16	7	50	16	2.0	2.0	1000	10	3750/5000 [#]	630*
6N136	300 mil DIP8	5	16	19	50	16	1.0	1.0	1000	10	3750/5000 [#]	630*
HCNW135	400 mil DIP8	5	16	5	–	16	2.0	2.0	1000	10	5000	1414
HCNW136	400 mil DIP8	5	16	19	50	16	1.0	1.0	1000	10	5000	1414
HCPL-0500	S08	5	16	7	50	16	2.0	2.0	1000	10	3750	560*
HCPL-0501	S08	5	16	19	50	16	1.0	1.0	1000	10	3750	560*
HCPL-050L	S08	3.3/5	16	15	50	16	1.0	1.0	1000	10	3750	560*
HCPL-2502	300 mil DIP8	5	16	15	22	16	0.8	0.8	–	–	3750/5000 [#]	–
HCPL-2503	300 mil DIP8	5	8	15	–	8	2.5	1.5	–	–	3750/5000 [#]	–
HCPL-250L	300 mil DIP8	3.3/5	16	15	50	16	1.0	1.0	1000	10	3750/5000 [#]	630*
Dual Channel												
HCPL-0530	S08	5	16	7	50	16	2.0	2.0	1000	10	3750	–
HCPL-0531	S08	5	16	19	50	16	1.0	1.0	1000	10	3750	–
HCPL-053L	S08	3.3/5	16	15	50	16	1.0	1.0	1000	10	3750	560*
HCPL-2530	300 mil DIP8	5	16	7	50	16	2.0	2.0	1000	10	3750/5000 [#]	–
HCPL-2531	300 mil DIP8	5	16	19	50	16	1.0	1.0	1000	10	3750/5000 [#]	–
HCPL-2533	300 mil DIP8	5	8	15	–	8	2.5	1.5	–	–	3750	–
HCPL-253L	300 mil DIP8	3.3/5	16	15	50	16	1.0	1.0	1000	10	3750/5000 [#]	630*

Notes: * - with IEC/EN/DIN EN 60747-5-2/5 Option 060, # - with UL 5000V_{RMS}/1 minute Option 020, ^ - Advanced information, may subject to changes.

100 kbd Darlington Transistor Output Optocoupler Product Selection

Part No.	Package	V _{DD} V	I _{F(on)} mA Min.	CTR			t _{PLH} μs Max.	t _{PHL} μs Max.	CMR - V/μs@V _{CM}		V _{ISO} V _{RMS} Min.	V _{ORM} V peak
				% Min.	% Max.	I _F mA			CMR V/μs (Min.)	V _{CM} V		
Single Channel												
4N45	300 mil DIP6	5	0.5	200	1000	10	500	50	–	–	3750	630
4N46	300 mil DIP6	5	0.5	200	1000	10	500	50	–	–	3750	630
6N138	300 mil DIP8	5	0.5	300	2600	1.6	50	15	1000	10	3750/5000 [#]	–
6N139	300 mil DIP8	5	0.5	400	5000	0.5	90	2	1000	10	3750/5000 [#]	630*
HCNW138	400 mil DIP8	5	0.5	300	–	1.6	70	11	1000	10	5000	1414
HCNW139	400 mil DIP8	5	0.5	400	–	0.5	11	11	1000	10	5000	1414
HCPL-0700	S08	5	0.5	300	2600	1.6	50	15	1000	10	3750	560*
HCPL-0701	S08	5	0.5	400	5000	0.5	10	2	1000	10	3750	560*
HCPL-070A	S08	5	0.04	800	25000	0.04	25	60	1000	10	3750	560*
HCPL-070L	S08	3.3/5	0.5	400	5000	0.5	90	30	1000	10	3750	560*
HCPL-270L	300 mil DIP8	3.3/5	0.5	400	5000	0.5	90	30	1000	10	3750/5000 [#]	630*
HCPL-4701	300 mil DIP8	5	0.04	800	25000	0.04	90	25	1000	10	3750/5000 [#]	630*
HCPL-M700	S05	5	0.5	300	2600	1.6	35	20	1000	10	3750	–
HCPL-M701	S05	5	0.5	400	3500	0.5	10	2	1000	10	3750	–
Dual Channel												
HCPL-0730	S08	5	0.5	400	5000	0.5	35	20	1000	10	3750	–
HCPL-0731	S08	5	0.5	400	5000	0.5	35	20	1000	10	3750	–
HCPL-073A	S08	5	0.04	800	25000	0.04	130	25	1000	10	3750	–
HCPL-073L	S08	3.3/5	0.5	400	5000	0.5	90	30	1000	10	3750	560*
HCPL-2730	300 mil DIP8	5	0.5	400	5000	0.5	35	20	1000	10	3750/5000 [#]	–
HCPL-2731	300 mil DIP8	5	0.5	400	5000	0.5	60	20	1000	10	3750/5000 [#]	–
HCPL-273L	300 mil DIP8	3.3/5	0.5	400	5000	0.5	90	30	1000	10	3750/5000 [#]	630*
HCPL-4731	300 mil DIP8	5	0.04	800	25000	0.04	90	25	1000	10	3750/5000 [#]	–

Notes: * - with IEC/EN/DIN EN 60747-5-2/5 Option 060, # - with UL 5000V_{RMS}/1 minute Option 020

Automotive 10MBd Logic Gate R²Coupler™ Product Selection

Part No.	Package	Operating Temperature °C	I _{F(on)} mA Min.	t _{PLH} ns Max.	t _{PHL} ns Max.	PWD ns Max.	t _{PSK} ns Max.	CMR - V/μs@V _{CM}		V _{ISO} V _{RMS} Min.	V _{FORM} V peak
								CMR V/μs (Min.)	V _{CM} V		
Single Channel											
ACPL-M61T-000E	S05	-40 to 125	5	100	100	35	40	15000	1000	3750	–

Automotive High Speed Digital CMOS Logic Gate R²Coupler™ Product Selection

Part No.	Package	Operating Temperature °C	V _{DD} V	I _{F(on)} mA Min.	Max Data Rate MBd Min.	t _{PLH} ns Max.	t _{PHL} ns Max.	PWD ns Max.	t _{PSK} ns Max.	CMR - V/μs@V _{CM}		V _{ISO} V _{RMS} Min.	V _{FORM} V peak
										CMR V/μs (Min.)	V _{CM} V		
ACPL-M71T-000E	S05	-40 to 125	5	10	12.5	35	35	8	20	15000	1000	3750	–
ACPL-M72T-000E	S05	-40 to 125	5	3.5	12.5	35	35	8	20	15000	1000	3750	–

Automotive Intelligent Power Module Interface R²Coupler™ Product Selection

Part No.	Package	Operating Temperature °C	I _F mA	CTR		t _{PLH} μs Max.	t _{PHL} μs Max.	CMR - V/μs@V _{CM}		V _{ISO} V _{RMS} Min.	V _{FORM} V peak
				% Min.	% Max.			CMR V/μs (Min.)	V _{CM} V		
Single Channel											
ACPL-M43T-000E	S05	-40 to 125	10	32	80	1.0	1.0	15000	1500	3750	–
ACPL-M46T-000E	S05	-40 to 125	10	44	90	0.55	0.55	15000	1500	3750	–

Automotive Miniature Analog Isolation Amplifier R²Coupler™ Product Selection

Part No.	Package	Operating Temperature °C	Gain Error at 25°C % Max.	Non-linearity % Typ.	Bandwidth kHz Typ.	V _{DD2} V	CMR - V/μs@V _{CM}		Output Configuration	V _{ISO} V _{RMS} Min.	V _{FORM} V peak
							CMR V/μs (Typ.)	V _{CM} V			
ACPL-782T-000E	DIP8	-40 to 125	±2	0.0037	100	4.5 - 5.5	15000	1000	Differential	3750	891

Automotive Gate Drive R²Coupler™ Product Selection

Part No.	Package	Operating Temperature °C	I _{F(on)} mA Min.	I _{OUT} A Min.	t _{PLH} μs Max.	t _{PHL} μs Max.	PDD μs Max.	V _{CC} V Max.	CMR - V/μs@V _{CM}		V _{ISO} V _{RMS} Min.	V _{FORM} V peak
									CMR V/μs (Min.)	V _{CM} V		
ACPL-312T-000E	300 mil DIP8	-40 to 125	7	2.5	0.5	0.5	0.35	30	25000	1500	3750	630
ACPL-36JT-000E [^]	S016	-40 to 125	–	2.5	0.5	0.5	0.35	30	15000	1500	3750	891





[^] - Advanced information, may subject to changes.

Automotive Low Speed R²Coupler™ Product Selection




Part No.	Package	Operating Temperature °C	I _{F(on)} mA Min.	CTR		t _{ON} μs Max.	t _{OFF} μs Min.	CMR - V/μs@V _{CM}		V _{ISO} V _{RMS} Min.	V _{FORM} V peak
				% Min.	% Min.			CMR V/μs (Min.)	V _{CM} V		
ACPL-M27T-000E [^]	S04	-40 to 125	5	TBD	600	TBD	TBD	10,000	1000	3750	–
ACPL-M27V-000E [^]	S04	-40 to 105	5	TBD	600	TBD	TBD	10,000	1000	3750	–

[^] - Advanced information, may subject to changes.

Extended Temperature R²Coupler™ Product Selection









Part No.	Package	Operating Temperature °C	I _{OUT A} (MAX)	I _{FEED} mA	CTR		t _{PLH} μs Max.	t _{PHL} μs Max.	PWD ns Max.	t _{PSK} ns Max.	CMR - V/μs@V _{CM}		V _{ISO} V _{RMS} Min.	V _{ORRM} V peak
					% Min.	% Max.					CMR V/μs (Min.)	V _{CM} V		
ACPL-312U-000E 	300 mil DIP8	-40 to 125	2.5	7	N/A	N/A	0.5	0.5	300	350 (PDD)	25000	1500	3750	630
ACPL-M43U-000E 	S05	-40 to 125	NA	10	32	80	1.0	1.0	850	NA	15000	1500	3750	567
ACPL-M46U-000E 	S05	-40 to 125	NA	10	44	90	0.4	0.6	450	NA	15000	1500	3750	567
ACPL-M61U-000E 	S05	-40 to 125	NA	5	NA	NA	0.1	0.1	35	40	15000	1000	3750	567

Digital Isolator Product Selection

Part No.	Channel	Package	Max. Data Rate MBd/Min.	t _{PLH} & t _{PHL} (V _{CC} =5.0V) ns		t _{PLH} & t _{PHL} (V _{CC} =3.3V) ns		PWD ns Max.	t _{PSK} ns Max.	CMR - V/μs@V _{CM}		V _{ISO} V _{RMS} Min.
				ns Max.	ns Max.	ns Max.	ns Max.			CMR V/μs (Min.)	V _{CM} V	
ACML-7400-000E [^] 	Quad	S016 Wide Body	100	15	18	3	6	25000	1000	5000		
ACML-7410-000E [^] 	Quad, 3/1, Bi-dir	S016 Wide Body	100	35	40	3	6	25000	1000	5000		
ACML-7420-000E [^] 	Quad, 2/2, Bi-dir	S016 Wide Body	100	35	40	3	6	25000	1000	5000		
HCPL-0900	Single	S08	100	15	18	3	6	15000	1000	2500		
HCPL-090J	Quad	S016 Narrow Body	100	35	40	3	6	15000	1000	2500		
HCPL-091J	Quad, 2/2 Bi-dir	S016 Narrow Body	100	15	18	3	6	15000	1000	2500		
HCPL-092J	Quad, 3/1 Bi-dir	S016 Narrow Body	100	15	18	3	6	15000	1000	2500		
HCPL-0930	Dual	S08	100	15	18	3	6	15000	1000	2500		
HCPL-0931	Dual, Bi-Dir	S08	100	15	18	3	6	15000	1000	2500		
HCPL-9000	Single	300 mil DIP8	100	15	18	3	6	15000	1000	2500		
HCPL-900J	Quad	S016 Wide Body	100	15	18	3	6	15000	1000	2500		
HCPL-901J	Quad, 2/2 Bi-dir	S016 Wide Body	100	15	18	3	6	15000	1000	2500		
HCPL-902J	Quad, 3/1 Bi-dir	S016 Wide Body	100	15	18	3	6	15000	1000	2500		
HCPL-9030	Dual	S08	100	15	18	3	6	15000	1000	2500		
HCPL-9031	Dual, Bi-Dir	S08	100	15	18	3	6	15000	1000	2500		
HCPL-9000	Single	300 mil DIP8	100	15	18	3	6	15000	1000	2500		
HCPL-9030	Dual	300 mil DIP8	100	15	18	3	6	15000	1000	2500		
HCPL-9031	Dual, Bi-Dir	300 mil DIP8	100	15	18	3	6	15000	1000	2500		



[^] - Advanced information, may subject to changes.

Miniature Isolation Amplifier Product Selection

Part No.	Package	Operating Temperature °C	Gain Error at 25 °C % Max.	Non-Linearity % Typ.	Bandwidth kHz Typ.	V _{DD2} V	CMR - V/μs@V _{CM}		Output Configuration	V _{ISO} V _{RMS} Min.	V _{IORM} V peak
							CMR V/μs (Typ.)	V _{CM} V			
ACPL-782T-000E 	DIP8	-40 to +125	±2	0.0037	100	4.5 - 5.5	15000	1000	Differential	3750	891
ACPL-785J-000E 	S016	-40 to +85	±5	0.06	30	4.5 - 5.5	25000	1000	Single-ended	3750	891*
ACPL-C780-000E 	Stretched S08	-40 to +85	±3	0.0037	100	4.5 - 5.5	15000	1000	Differential	5000	1140*
ACPL-C78A-000E 	Stretched S08	-40 to +85	±1	0.0037	100	4.5 - 5.5	15000	1000	Differential	5000	1140*
ACPL-C784-000E 	Stretched S08	-40 to +85	±5	0.0037	100	4.5 - 5.5	15000	1000	Differential	5000	1140*
ACPL-C791-000E [^] 	Stretched S08	-40 to +105	±0.5	0.0037	200	3 - 5.5	15000	1000	Differential	5000	1140*
ACPL-C793-000E [^] 	Stretched S08	-40 to +105	±1	0.0037	200	3 - 5.5	15000	1000	Differential	5000	1140*
ACPL-C795-000E [^] 	Stretched S08	-40 to +105	±3	0.0037	200	3 - 5.5	15000	1000	Differential	5000	1140*
HCPL-7510	DIP8	-40 to +85	±3	0.06	100	4.5 - 5.5	15000	1000	Single-ended	3750	891*
HCPL-7520	DIP8	-40 to +85	±5	0.06	100	4.5 - 5.5	15000	1000	Single-ended	3750	891*
HCPL-7800	DIP8	-40 to +85	±3	0.0037	100	4.5 - 5.5	15000	1000	Differential	3750	891
HCPL-7800A	DIP8	-40 to +85	±1	0.0037	100	4.5 - 5.5	15000	1000	Differential	3750	891
HCPL-7840	DIP8	-40 to +85	±5	0.0037	100	4.5 - 5.5	15000	1000	Differential	3750	891*
HCPL-788J	S016	-40 to +85	±3	0.06	30	4.5 - 5.5	25000	1000	Single-ended	3750	891

Notes: * - with IEC/EN/DIN EN 60747-5-2/5 Option 060, ^ - Advanced Information.

Isolated Sigma-Delta Modulator Product Selection

Part No.	Package	Operating Temperature °C	Gain Error at 25 °C % Max.	INL LSB Typ.	ENOB Bits Typ.	V _{DD2} V	CMR - V/μs@V _{CM}		Clock MHz Typ.	V _{ISO} V _{RMS} Min.	V _{IORM} V peak
							CMR V/μs (Typ.)	V _{CM} V			
ACPL-796J-000E 	S016	-40 to +105	±1	3	12	3 - 5.5	25000	1000	5 - 20, External	5000	1140*
ACPL-C797-000E [^] 	Stretched S08	-40 to +105	±1	3	12	3 - 5.5	25000	1000	10, Internal	5000	1140*
HCPL-0872	S016	-40 to +85	Dual, Programmable Digital Filter with SPI Interface			4.5 - 5.5 [~]	NA	NA	Modulator Clock	NA	NA
HCPL-7560	DIP8	-40 to +85	±5	64	8	4.5 - 5.5	20000	1000	10, Internal	3750	891*
HCPL-7860	DIP8	-40 to +85	±1 (Matching)	3	11	4.5 - 5.5	20000	1000	10, Internal	3750	891
HCPL-786J	S016	-40 to +85	±2	3	11	4.5 - 5.5	20000	1000	10, Internal	3750	891

Notes: * - with IEC/EN/DIN EN 60747-5-2/5 Option 060, ^ - Advanced Information, may subject to changes, ~ - V_{DD}

Integrated Gate Drive Optocoupler Product Selection

Part No.	Package	I _{F(ON)} mA Min.	I _{OUT} A Min.	I _{OUT} A Max.	t _{PLH} µs Max.	t _{FHL} µs Max.	PDD µs Max.	V _{CC} V Max.	CMR - V/µs@V _{CM}		V _{ISO} V _{RMS} Min.	V _{FORM} V peak
									CMR V/µs (Min.)	V _{CM} V		
Single Channel												
ACNW3130-000E	400 mil DIP8	10	2.0	2.5	0.5	0.5	0.35	30	40000	1500	5000	1414
ACNW3190-000E	400 mil DIP8	10	4.0	5.0	0.5	0.5	0.3	30	15000	1500	5000	1414
ACPL-312T-000E	300 mil DIP8	7	2.0	2.5	0.5	0.5	0.35	30	25000	1500	3750	630
ACPL-312U-000E	300 mil DIP8	7	2.0	2.5	0.5	0.5	0.35	30	25000	1500	3750	630
ACPL-3130-000E	300 mil DIP8	7	2.0	2.5	0.5	0.5	0.35	30	40000	1500	3750	630*
ACPL-330J-000E	SO16	8	1.0	1.5	0.25	0.25	0.1	30	15000	1500	3750	891
ACPL-331J-000E												
– 1.0A Highly Integrated Gate Drive Optocoupler with Active Miller Clamp, Over-Current Protection and Fault Feedback – Under Voltage Lock-Out Protection (UVLO) with Hysteresis – Automatic Fault Reset after fixed delay time (for ACPL-330J-000E only)												
ACPL-332J-000E	SO16	8	2.0	2.5	0.25	0.25	0.1	30	15000	1500	3750	891
ACPL-333J-000E												
– 2.0A Highly Integrated Gate Drive Optocoupler with Active Miller Clamp, Over-Current Protection and Fault Feedback – Under Voltage Lock-Out Protection (UVLO) with Hysteresis – Automatic Fault Reset after fixed delay time (for ACPL-333J-000E only).												
ACPL-36JT-000E [^]	SO16	–	2.0	2.5	0.5	0.5	–	30	15000	1500	3750	891
ACPL-H312-000E	Stretched SO8	7	2.0	2.5	0.5	0.5	0.35	30	15000	1500	3750	891*
ACPL-H342-000E [^]	Stretched SO8	7	2.0	2.5	0.5	0.25	-0.2	30	25000	1500	3750	891*
ACPL-J313-000E	300 mil DIP8	7	2.0	2.5	0.5	0.5	0.35	30	40000	1500	3750	891
ACPL-K312-000E	Stretched SO8	7	2.0	2.5	0.5	0.5	0.35	30	15000	1500	5000	1140*
ACPL-K342-000E [^]	Stretched SO8	7	2.0	2.5	0.5	0.25	-0.2	30	25000	1500	5000	1140*
ACPL-P302-000E	Stretched SO6	7	0.2	0.4	0.7	0.7	0.5	30	10000	1000	3750	891*
ACPL-P314-000E	Stretched SO6	8	0.4	0.6	0.7	0.7	0.5	30	10000	1000	3750	891*
ACPL-T350-000E	300 mil DIP8	7	2.0	2.5	0.5	0.5	0.35	30	15000	1500	3750	630*
ACPL-W302-000E	Stretched SO6	7	0.2	0.4	0.7	0.7	0.5	30	10000	1000	3750	1140*
ACPL-W314-000E	Stretched SO6	8	0.4	0.6	0.7	0.7	0.5	30	10000	1000	5000	1140*
HCNW3120	400 mil DIP8	10	2.0	2.5	0.5	0.5	0.3	30	25000	1500	5000	1414
HCPL-0302	SO8	7	0.2	0.4	0.7	0.7	0.5	30	10000	1000	3750	566*
HCPL-0314	SO8	8	0.4	0.6	0.7	0.7	0.5	30	25000	1000	3750	566*
HCPL-3020	300 mil DIP8	7	0.2	0.4	0.7	0.7	0.5	30	10000	1000	3750	630*
HCPL-3120	300 mil DIP8	7	2.0	2.5	0.5	0.5	0.35	30	25000	1500	3750	630*
HCPL-3140	300 mil DIP8	8	0.4	0.6	0.7	0.7	0.5	30	25000	1000	3750	630*
HCPL-3150	300 mil DIP8	7	0.5	0.6	0.5	0.5	0.35	30	15000	1500	3750	630*
HCPL-316J	SO16	–	2.0	2.5	0.5	0.5	0.3	30	15000	1500	3750	891
– 2.0 A Highly Integrated Gate Drive Optocoupler with over-current Protection and Fault Feedback – CMOS compatible – Under Voltage Lock-Out Protection (UVLO) with Hysteresis												
HCPL-3180	300 mil DIP8	10	2.0	2.5	0.2	0.2	0.09	20	10000	1500	3750	630*
HCPL-J312	300 mil DIP8	7	2.0	2.5	0.5	0.5	0.35	30	25000	1500	3750	891
HCPL-J314	300 mil DIP8	8	0.4	0.6	0.7	0.7	0.5	30	25000	1500	3750	891
HCPL-T250	300 mil DIP8	7	0.5	1.5	0.5	0.5	–	30	5000	600	3750	630*
HCPL-T251	300 mil DIP8	8	0.1	0.4	1.0	1.0	–	30	10000	600	3750	–
Dual Channel												
HCPL-314J	SO16	8	0.4	0.6	0.7	0.7	0.5	30	25000	1500	3750	891
HCPL-315J	SO16	7	0.5	0.6	0.5	0.5	0.35	30	15000	1500	3750	891

Notes: * - with IEC/EN/DIN EN 60747-5-2/5 Option 060, ^ - Advanced Information, may subject to changes.

Intelligent Power Module Interface Optocoupler Product Selection

Part No.	Package	I _{fon} mA Min.	CTR			t _{PLH} μs Max.	t _{PHL} μs Max.	PDD μs Max.	CMR - V/μs@V _{CM}		V _{ISO} V _{RMS} Min.	V _{ORM} V peak
			% Min.	% Max.	I _F mA				CMR V/μs (Min.)	V _{CM} V		
Single Channel												
ACPL-4800-000E	300 mil DIP8	6	—	—	—	0.35	0.35	0.25	30000	1000	3750	630*
ACPL-K453-000E	Stretched S08	16	19	50	16	1.00	1.00	1.00	15000	1500	5000	1140*
ACPL-M43T-000E R ² Coupler	S05	10	32	80	10	1.0	1.0	0.9	15000	1500	3750	—
ACPL-M43U-000E R ² Coupler	S05	10	32	80	10	1	1	0.9	15000	1000	3750	—
ACPL-M46T-000E R ² Coupler	S05	10	44	90	10	0.55	0.55	0.45	15000	1500	3750	—
ACPL-M46U-000E R ² Coupler	S05	10	44	90	10	0.4	0.55	0.45	15000	1000	3750	—
ACPL-P454-000E	Stretched S06	12	26	65	12	1.14	1.00	1.30	15000	1500	3750/5000 [#]	891*
ACPL-P456-000E	Stretched S06	10	44	>90	10	0.55	0.45	0.45	15000	1500	3750	891*
ACPL-P480-000E	Stretched S06	6	—	—	—	0.35	0.35	0.25	20000	1000	3750	891*
ACPL-P481-000E	Stretched S06	6	—	—	—	0.35	0.35	0.25	20000	1000	3750	891*
ACPL-W454-000E	Stretched S06	12	26	65	12	1.14	1.00	1.30	15000	1500	5000	1140*
ACPL-W456-000E	Stretched S06	10	44	>90	10	0.55	0.45	0.45	15000	1500	5000	1140*
ACPL-W481-000E	Stretched S06	6	—	—	—	0.35	0.35	0.25	20000	1000	5000	1140*
HCNW4502	400 mil DIP8	16	19	50	16	1.0	1.0	—	1000	10	5000	1414
HCNW4503	400 mil DIP8	16	19	50	16	1.0	1.0	—	15000	1500	5000	1414
HCNW4504	400 mil DIP8	12	25	65	12	1.4	1.0	1.3	15000	1500	5000	1414
HCNW4506	400 mil DIP8	10	44	>90	10	0.55	0.40	—	15000	1500	5000	1414
HCPL-0452	S08	16	19	50	16	1.0	1.0	—	1000	10	3750	560*
HCPL-0453	S08	16	19	50	16	1.0	1.0	1.0	15000	1500	3750	560*
HCPL-0454	S08	12	26	65	12	1.4	1.0	—	15000	1500	3750	560*
HCPL-0466	S08	10	44	>90	10	0.55	0.48	0.45	15000	1500	3750	560*
HCPL-4502	300 mil DIP8	16	19	50	16	1.0	1.0	—	1000	10	3750/5000 [#]	630*
HCPL-4503	300 mil DIP8	16	19	50	16	1.0	1.0	1.0	15000	1500	3750/5000 [#]	630*
HCPL-4504	300 mil DIP8	12	26	65	12	1.4	1.0	1.3	15000	1500	3750/5000 [#]	630*
HCPL-4506	300 mil DIP8	10	44	>90	10	0.55	0.40	0.45	15000	1500	3750/5000 [#]	630*
HCPL-J454	300 mil DIP8	12	21	65	12	0.7	0.5	1.3	15000	1500	3750	891
HCPL-J456	300 mil DIP8	10	44	>90	10	0.55	0.40	0.45	15000	1500	3750	891
HCPL-M452	S05	16	20	50	16	1.0	1.0	—	1000	10	3750	—
HCPL-M453	S05	16	20	50	16	1.0	1.0	1.0	15000	1500	3750	—
HCPL-M454	S05	12	26	65	12	1.4	1.0	1.3	15000	1500	3750	560*
HCPL-M456	S05	10	44	>90	10	0.55	0.40	0.45	15000	1500	3750	560*
Dual Channel												
HCPL-0534	S08	16	19	50	16	1.0	1.0	—	15000	1500	3750	560*
HCPL-4534	300 mil DIP8	16	19	50	16	1.0	1.0	—	15000	1500	3750/5000 [#]	630*

Notes: * - with IEC/EN/DIN EN 60747-5-2/5 Option 060, # - with UL 5000V_{RMS}/1 minute Option 020



Isolated Line Receiver Product Selection

Part No.	Package	Output Collector Output mA Max.	t _{PLH} μs Max.	t _{PHL} μs Max.	CMR - V/μs@V _{CM}		V _{ISO} V _{RMS} Min.
					CMR V/μs (Min.)	V _{CM} V	
HCPL-2602	300 mil DIP8	50	100	100	1000	50	3750
HCPL-2612	300 mil DIP8	50	100	100	3500	300	3750
40 ns max propagation delay skew (part to part) Line termination circuitry included							

Isolated 20 mA Current Loop Transmitter/Receiver Product Selection

Part No.	Package	Data Rate kBd @ (meters)	t_{PLH} μ s Max.	t_{PHL} μ s Max.	CMR - V/ μ s@V _{CM}		V _{ISO} V _{RMS} Min.
					CMR V/ μ s (Min.)	V _{CM} V	
Transmitter							
HCPL-4100	300 mil DIP8	20 (400)	1.6	1.0	1000	50	3750
CMOS compatible data input for HCPL-4100							
Receiver							
HCPL-4200	300 mil DIP8	20 (1400)	1.6	1.0	1000	50	3750
CMOS compatible data input for HCPL-4200							

Isolated Voltage/Current Detector Product Selection

Part No.	Package	Input Threshold Current		Hysteresis mA Typ.	t_{PLH} μ s Max.	t_{PHL} μ s Max.	CMR - V/ μ s@V _{CM}		V _{ISO} V _{RMS} Min.	V _{IORM} V _{PEAK}
		mA					CMR V/ μ s (Min.)	V _{CM} V		
		Min.	Max.							
ACPL-K370-000E 	Stretched S08	1.96	3.11	1.2	40	15	600	140	5000	1140*
ACPL-K376-000E 	Stretched S08	0.87	1.56	0.6	40	15	600	140	5000	1140*
HCPL-0370	S08	1.96	3.11	1.2	40	15	600	140	3750	567*
HCPL-3700	300 mil DIP8	1.96	3.11	1.2	40	15	600	140	3750	630*
HCPL-3760	300 mil DIP8	0.87	1.56	0.6	40	15	600	140	3750	630*

Notes: * - with IEC/EN/DIN EN 60747-5-2/5 Option 060

High Linearity Analog Optocoupler Product Selection

Part No.	Package	Transfer Gain % Max.	DC Non-Linearity % Max.	CTR		V _{ISO} V _{RMS} Min.	V _{IORM} V peak
				% Min.	% Max.		
HCNR200	400 mil DIP8	+/-15	0.25	0.25	0.75	5000	1414*
HCNR201	400 mil DIP8	+/-5	0.05	0.36	0.72	5000	1414*
-65 ppm/°C gain temperature coefficient 1.5 MHz bandwidth							

Notes: * - with IEC/EN/DIN EN 60747-5-2/5 Option 050

Wideband Analog/Video Optocoupler Product Selection

Part No.	Package	Bandwidth MHz Typ.	DC Non-Linearity % Max.	CTR % Typ.	IMRR dB Typ.	V _{ISO} V _{RMS} Min.	V _{IORM} V peak
HCPL-4562	300 mil DIP8	17	0.25	45	122	3750/5000 [#]	630*
0.3% / °C gain temperature coefficient							

Notes: * - with IEC/EN/DIN EN 60747-5-2/5 Option 060, # - with UL 5000V_{RMS}/1 minute Option 020

General Purpose Phototransistor Optocoupler – DC Input Product Selection

Part No.	Package	Absolute Max. I _F mA	CTR				V _{CE(sat)}			t _r /t _f μs typ	BV _{CEO} V Min.	V _F		V _{ISO} V _{RMS} Min.	Note
			% Min.	% Max.	I _F mA	V _{CE} V	V Max.	I _F mA	I _C mA			V Max.	I _F mA		
Single Channel-4 pin															
ACPL-217-500E [§] NEW	S04	50	50	600	5	5	0.4	8	2.4	2/3	80	1.4	20	3000	1
HCPL-181-000E [#]	S04	50	50	600	5	5	0.2	20	1	4/3	80	1.4	20	3750	1
HCPL-817-000E* [‡]	300 mil DIP4	50	50	600	5	5	0.2	20	1	4/3	70	1.4	20	5000	1/2/3
Single Channel-6 pin															
4N25-000E	300 mil DIP6	80	20	–	10	10	0.5	50	2	3/3	30	1.5	10	2500	1/2/3
4N35-000E	300 mil DIP6	60	100	–	10	10	0.3	50	2	3/3	30	1.5	10	3550	1/2/3
CNY17-1-000E	300 mil DIP6	60	40	80	10	5	0.3	10	2.5	5/5	70	1.7	60	5000	1/2/3
CNY17-2-000E	300 mil DIP6	60	63	125	10	5	0.3	10	2.5	5/5	70	1.7	60	5000	1/2/3
CNY17-3-000E	300 mil DIP6	60	100	200	10	5	0.3	10	2.5	5/5	70	1.7	60	5000	1/2/3
CNY17-4-000E	300 mil DIP6	60	160	320	10	5	0.3	10	2.5	5/5	70	1.7	60	5000	1/2/3
Dual Channel-8 pin															
ACPL-227-500E* [‡] NEW	S08	50	50	600	5	5	0.4	8	2.4	2/3	80	1.3	20	3000	1
ACPL-827-000E [@] NEW	300 mil DIP8	50	50	600	5	5	0.2	20	1	4/3	70	1.4	20	5000	1/2/3
Quad Channel-16 pin															
ACPL-247-000E NEW	S016	50	50	600	5	5	0.4	8	2.4	2/3	80	1.3	20	3000	1
ACPL-847-000E NEW	300 mil DIP16	50	50	600	5	5	0.2	20	1	4/3	70	1.4	20	5000	1/2/3

General Purpose Phototransistor Optocoupler – AC Input Product Selection

Part No.	Package	Absolute Max. I _F mA	CTR				V _{CE(sat)}			t _r /t _f μs typ	BV _{CEO} V Min.	V _F		V _{ISO} V _{RMS} Min.	Note
			% Min.	% Max.	I _F mA	V _{CE} V	V Max.	I _F mA	I _C mA			V Max.	I _F mA		
Single Channel-4 pin															
ACPL-214-500E ^ζ NEW	S04	+/-50	20	400	±5	5	0.4	±8	2.4	2/3	80	1.4	±20	3000	1
HCPL-354-000E	S04	+/-50	20	400	±1	5	0.2	±20	1	4/3	35	1.4	±20	3750	1
HCPL-354-00AE	S04	+/-50	50	150	±1	5	0.2	±20	1	4/3	35	1.4	±20	3750	1
HCPL-814-000E	300 mil DIP4	+/-50	20	300	±1	5	0.2	±20	1	4/3	35	1.4	±20	5000	1/2/3
HCPL-814-00AE	300 mil DIP4	+/-50	50	150	±1	5	0.2	±20	1	4/3	35	1.4	±20	5000	1/2/3
Dual Channel-8 pin															
ACPL-224-500E NEW	S08	+/-50	20	400	±1	5	0.4	±8	2.4	2/3	80	1.4	±20	3000	1
ACPL-824-000E NEW	300 mil DIP8	+/-50	20	300	±1	5	0.2	±20	1	4/3	70	1.4	±20	5000	1/2/3
Quad Channel-16 pin															
ACPL-244-500E NEW	S016	+/-50	20	400	±1	5	0.4	±8	2.4	2/3	80	1.4	±20	3000	1
ACPL-844-000E NEW	300 mil DIP16	+/-50	20	300	±1	5	0.2	±20	1	4/3	70	1.4	±20	5000	1/2/3

Notes: 1 - IEC/EN/DIN EN 60747-5-2/5 Option 060 available, 2 - 0.4" Lead Spacing Option W00 available, 3 - Gull Wing SMD option available

* CTR rank with Option 000E, 00AE, 00BE, 00CE, 00DE and 00LE available, # - CTR rank with option 000E, 00AE, 00BE, 00CE and 00DE available

@ CTR rank with Option 000E, 00BE and 00CE available

§ CTR rank with option 500E, 50AE, 50BE, 50CE and 50DE available,

‡ CTR rank with option 500E, 50BE, 50CE

ζ - CTR rank with option 500E and 50AE available.

Solid State Relay (Photo MOSFET) Product Selection

Part No.	Function	Package	Channel & Output Type	V _{ISO} kV Min.	V _{O(OFF)} V Min.	I _O A Max.	I _{O(OFF)} nA Max.	C _(OFF) pF Max.	R _(ON) Ω Max.	T _{ON} ms Max.	T _{OFF} ms Max.
ASSR-1219-001E	NEW STD	300mil DIP6	1 Form A	3.75	60	0.2	1000	–	10	5.0	5.0
ASSR-1228-002E	NEW STD	300mil DIP8	2 Form A	3.75	60	0.2	1000	–	10	5.0	5.0
ASSR-1410-003E	NEW GP	S04	1 Form A	3.75	60	0.6	100	–	1	0.5	0.2
ASSR-1411-001E	NEW GP	300mil DIP6	1 Form A	3.75	60	0.6	100	–	1	0.5	0.2
ASSR-1420-002E	NEW GP	300mil DIP8	2 Form A	3.75	60	0.6	100	–	1	0.5	0.2
ASSR-1510-003E	NEW HC	S04	1 Form A	3.75	60	1.0	100	–	0.5	1	0.2
ASSR-1511-001E	NEW HC	300mil DIP6	1 Form A	3.75	60	1.0	100	–	0.5	1	0.2
ASSR-1520-002E	NEW HC	300mil DIP8	2 Form A	3.75	60	1.0	100	–	0.5	1	0.2
ASSR-1530-005E	NEW HC	S08	2 Form A	3.75	60	1.0	100	–	0.5	1	0.2
ASSR-1611-001E	NEW HC	300mil DIP6	1 Form A	3.75	60	2.5	100	–	0.1	3.0	0.5
ASSR-301C-003E	NEW Low CxR	S04	1 Form A	3.75	250	0.05	10	15	40	0.5	0.2
ASSR-302C-002E	NEW Low CxR	300mil DIP8	2 Form A	3.75	250	0.05	10	15	40	0.5	0.2
ASSR-3210-003E	NEW GP	S04	1 Form A	3.75	250	0.2	100	–	10	1	0.2
ASSR-3211-001E	NEW GP	300mil DIP6	1 Form A	3.75	250	0.2	100	–	10	1	0.2
ASSR-321R-003E	NEW Low CxR	S04	1 Form A	3.75	250	0.2	4	60	8.5	0.5	0.2
ASSR-3220-002E	NEW GP	300mil DIP8	2 Form A	3.75	250	0.2	100	–	10	1	0.2
ASSR-322R-002E	NEW Low CxR	300mil DIP8	2 Form A	3.75	250	0.2	1	60	8.5	0.5	0.2
ASSR-401C-003E	NEW Low CxR	S04	1 Form A	3.75	400	0.04	10	15	100	0.5	0.2
ASSR-402C-002E	NEW Low CxR	300mil DIP8	2 Form A	3.75	400	0.04	10	15	100	0.5	0.2
ASSR-4110-003E	NEW GP	S04	1 Form A	3.75	400	0.12	100	–	25	0.5	0.2
ASSR-4111-001E	NEW GP	300mil DIP6	1 Form A	3.75	400	0.12	100	–	25	0.5	0.2
ASSR-4118-003E	NEW STD	S04	1 Form A	3.75	400	0.1	1000	–	35	3.0	1.0
ASSR-4119-001E	NEW STD	300mil DIP6	1 Form A	3.75	400	0.1	1000	–	35	3.0	1.0
ASSR-4120-002E	NEW GP	300mil DIP8	2 Form A	3.75	400	0.12	100	–	25	0.5	0.2
ASSR-4128-002E	NEW STD	300mil DIP8	2 Form A	3.75	400	0.1	1000	–	35	3.0	1.0
ASSR-5211-001E	NEW HC	300mil DIP6	1 Form A	3.75	600	0.2	100	–	16	3.0	0.5

Note: ^ = Advanced Information, may subject to changes. GP = General Purpose, Low CxR = Low C_(OFF) x R_(ON), HC = High Current, STD = Standard









Solid State Relay (Photovoltaic Driver) Product Selection







Part No.	Function	Package	Channel & Output Type	V _{OC} V Min.	I _{SC} μA Min.	V _{ISO} V Min.
ASSR-V621-002E	NEW GP	300mil DIP8	2 Form A	6.5	15	3750
ASSR-V622-002E	NEW GP	300mil DIP8	2 Form A	6.5	15	3750

Power Line Communication Interface Product Selection

Part No.	Package	Signal Path	Bandwidth MHz Typ.	GBWP MHz Typ.	I _O A _{APP} Typ.	Harmonic Distortion dBc, Max.		Isolation	V _{CC} V Typ.	V _{ISO} V _{RMS} Min.	V _{IORM} V peak
						HD2	HD3				
ACPL-0820-000E	NEW S08	Tx only	–	3.0	1.5	-60	-65	No	5	–	–
HCPL-0810	S08	Tx only	–	3.5	1.0	-60	-65	No	5	–	–
HCPL-800J	S016	Tx/Rx	0.5	–	1.0	-60	-65	Yes	5	3750	891
HCPL-8100	300 mil DIP8	Tx only	–	3.5	1.0	-60	-65	No	5	–	–

Photo IC

	Package	Creepage (mm)	Clearance (mm)	Internal Clearance (mm)	IEC/EN/DIN EN 60747-5-2/5 V _{form} (V _{peak})	UL 1577 V _{iso} (V _{rms})
S05		5.0	5.0	0.08	560	3750
	NEW ACPL-Pxxx 	8.0	7.0	0.08	891	3750
Stretched S06#	NEW ACPL-Wxxx 	8.0	8.0	0.08	1140	5000
		4.5	4.9	0.08	560	2500
S08		4.8	4.9	0.08	560	3750
	NEW ACPL-Hxxx 	8.0	7.0	0.08	891	3750
Stretched S08#	NEW ACPL-Kxxx 	8.0	8.0	0.08	1140	5000
		8.0	8.0	0.5	1140	5000

	Package	Creepage (mm)	Clearance (mm)	Internal Clearance (mm)	IEC/EN/DIN EN 60747-5-2/5 V _{form} (V _{peak})	UL 1577 V _{iso} (V _{rms})
S016	ACSL 	4.5	4.9	0.08	560	2500
		8.3	8.3	0.5	891	3750
8-Pin**		7.4	7.1	0.08	630	3750
		8.0	7.4	0.5	891	3750
		10.0	9.6	1.0	1414	5000
Wide Body**		13.0	12.8	2.0	1768	7500

Advanced information, subject to change

Packages are UL 1577, CSA approved, IEC/EN/DIN EN 60747-2/5

*Digital Isolator (UL 1577 approved)

**Gull Wing Packages, through-hole version also available

#Stretched Packages nonmenclature:



ACPL-Pxxx (Stretched S06, 7mm clearance)

ACPL-Wxxx (Stretched S06, 8mm clearance)








ACPL-Hxxx (Stretched S08, 7mm clearance)

ACPL-Kxxx/ACPL-Cxxx (Stretched S08, 8mm clearance)



Solid State Relay (Photo MOSFET) Phototransistor

	Package	Creepage (mm)		Clearance (mm)	Internal Clearance (mm)	IEC/EN/DIN EN 60747-5-2/5 V_{IORM} (V _{peak})	UL 1577 V_{ISO} (V _{rms})
S04		4.9	4.9	0.08	-	3750	
6-Pin**		7.4	7.1	0.08	-	3750	
8-Pin**		7.4	7.1	0.08	-	3750	
S08		4.9	4.8	0.08	-	3750	

Above packages are either black or white subjected to the part number ordered.

	Package	Creepage (mm)		Clearance (mm)	Internal Clearance (mm)	IEC/EN/DIN EN 60747-5-2/5 V_{IORM} (V _{peak})	UL 1577 V_{ISO} (V _{rms})	
S04		Half-Pitch		4.9	4.9	0.4	565	3000
		4.9	4.9	0.4	565	3750		
S08		NEW Half-Pitch		4.9	4.9	0.4	565	3000
		4.9	4.9	0.4	565	3000		
S016		NEW Half-Pitch		4.9	4.9	0.4	565	3000
		4.9	4.9	0.4	565	3000		
4-Pin**		8.0	7.6	0.4	850	5000		
6-Pin**		8.0	7.6	0.4	850	2500 to 5000		
8-Pin**		Full-Pitch		8.0	7.6	0.4	850	5000
16-Pin**		Full-Pitch		8.0	7.6	0.4	850	5000
		8.0	7.6	0.4	850	5000		

Digital Isolator

	Package	Creepage (mm)		Clearance (mm)	Internal Clearance (mm)	IEC/EN/DIN EN 60747-5-2/5 V_{IORM} (V _{peak})	UL 1577 V_{ISO} (V _{rms})
S08*		4.0	4.0	-	-	2500	
S016*		4.0	4.0	-	-	2500	
		8.1	8.1	-	-	2500	
		ACML	8.1	8.1	-	5600	

Hermetically Sealed Optocouplers

Hermetically Sealed High Speed Logic Gate Optocouplers

Commercial Part Number	Class H	DSCC SMD Class H *	Class K	DSCC SMD Class K *	Package				No. of Channels	Typical Data Rate	Common Mode @ $V_{OH}=50V$	Input Current	Withstand Test Voltage	Supply Voltage
					8 pin DIP	16 pin DIP	16 pin FP	20 pad LCCC						
6N134	6N134/883B	8102801	HCPL-268K	5962-9800101K		•			2	10MBd	1000V/μs	10 mA	1500 Vdc	5.5V
ACPL-2670L	ACPL-2672L	5962-0824203H	ACPL-268KL	5962-0824203K		•			2	10MBd	1000V/μs	10 mA	1500 Vdc	3.3V
ACPL-5600L	ACPL-5601L	5962-0824201H	ACPL-560KL	5962-0824201K	•				1	10MBd	1000V/μs	10 mA	1500 Vdc	3.3V
ACPL-5630L	ACPL-5631L	5962-0824202H	ACPL-563KL	5962-0824202K	•				2	10MBd	1000V/μs	10 mA	1500 Vdc	3.3V
HCPL-1930	HCPL-1931	5962-8957201	HCPL-193K	5962-8957202K		•			2	10MBd	1000V/μs	10 mA	1500 Vdc	5.5V
HCPL-5200	HCPL-5201	5962-8876801	HCPL-520K	5962-8876802K	•				1	5MBd	1000V/μs	2-8 mA	1500 Vdc	20V
HCPL-5230	HCPL-5231	5962-8876901	HCPL-523K	5962-8876904K	•				2	5MBd	1000V/μs	2-8 mA	1500 Vdc	20V
HCPL-5400	HCPL-5401	5962-8957001	HCPL-540K	5962-8957002K	•				1	20MBd	500V/μs	6-10 mA	1500 Vdc	5.25V
HCPL-5430	HCPL-5431	5962-8957101	HCPL-543K	5962-8957103K	•				2	20MBd	500V/μs	6-10 mA	1500 Vdc	5.25V
HCPL-5600	HCPL-5601	5962-9085501H	HCPL-560K	5962-9085501K	•				1	10MBd	1000V/μs	10 mA	1500 Vdc	5.5V
HCPL-5630	HCPL-5631	8102802	HCPL-563K	5962-9800102K	•				2	10MBd	1000V/μs	10 mA	1500 Vdc	5.5V
HCPL-5650	HCPL-5651	8102805	—	—	•				2	10MBd	1000V/μs	10 mA	2500 Vdc	5.5V
HCPL-6230	HCPL-6231	5962-8876902	HCPL-623K	5962-8876905K				•	2	5MBd	1000V/μs	2-8 mA	1500 Vdc	20V
HCPL-6250	HCPL-6251	5962-8876903	HCPL-625K	5962-8876906K			•		4	5MBd	1000V/μs	2-8 mA	1500 Vdc	20V
HCPL-6430	HCPL-6431	5962-8957102	HCPL-643K	5962-8957104K				•	2	20MBd	500V/μs	6-10 mA	1500 Vdc	5.25V
HCPL-6630	HCPL-6631	8102803	HCPL-663K	5962-9800103K				•	2	10MBd	1000V/μs	10 mA	1500 Vdc	5.5V
HCPL-6650	HCPL-6651	8102804	HCPL-665K	5962-9800104K				•	4	10MBd	1000V/μs	10 mA	1500 Vdc	5.5V

*DSCC SMD number does not include extensions for lead form and finish

Hermetically Sealed High Speed Transistor Optocouplers

Commercial Part Number	Class H	DSCC SMD Class H *	Class K	DSCC SMD Class K *	Package				No. of Channels	Typical Data Rate	Current Transfer Ratio	Input Current	Withstand Test Voltage	Supply Voltage
					8 pin DIP	16 pin DIP	16 pin FP	20 pad LCCC						
4N55	4N55/883B	5962-8767901	HCPL-257K	5962-8767905K		•			2	700 KBd	9% Min.	16 mA	1500 Vdc	18V
HCPL-5500	HCPL-5501	5962-9085401H	HCPL-550K	5962-9085401K	•				1	700 KBd	9% Min.	16 mA	1500 Vdc	18V
HCPL-5530	HCPL-5531	5962-8767902	HCPL-553K	5962-8767906K	•				2	700 KBd	9% Min.	16 mA	1500 Vdc	18V
HCPL-6530	HCPL-6531	5962-8767903	HCPL-653K	5962-8767907K				•	2	700 KBd	9% Min.	16 mA	1500 Vdc	18V
HCPL-6550	HCPL-6551	5962-8767904	HCPL-655K	5962-8767908K				•	4	700 KBd	9% Min.	16 mA	1500 Vdc	18V

*DSCC SMD number does not include extensions for lead form and finish

Hermetically Sealed High Gain Optocouplers

Commercial Part Number	Class H	DSCC SMD Class H *	Class K	DSCC SMD Class K *	Package				No. of Channels	Typical Data Rate	Current Transfer Ratio	Input Current	Withstand Test Voltage	Supply Voltage
					8 pin DIP	16 pin DIP	16 pin FP	20 pad LCCC						
ACPL-1770L	ACPL-1772L	5962-0822703H	ACPL-177KL	5962-0822703K		•			4	100 KBd	300% min	0.5-5 mA	1500 Vdc	3.3V
ACPL-5700L	ACPL-5701L	5962-0822701H	ACPL-570KL	5962-0822701K	•				1	100 KBd	300% min	0.5-5 mA	1500 Vdc	3.3V
ACPL-5730L	ACPL-5731L	5962-0822702H	ACPL-573KL	5962-0822702K	•				2	100 KBd	300% min	0.5-5 mA	1500 Vdc	3.3V
6N140A	6N140A/883B	8302401	HCPL-177K	5962-9800201K		•			4	100 KBd	300% min	0.5-5 mA	1500 Vdc	18V
HCPL-5700	HCPL-5701	5962-8981001	HCPL-570K	5962-8981002K	•				1	100 KBd	300% min	0.5-5 mA	1500 Vdc	18V
HCPL-5730	HCPL-5731	5962-8978501	HCPL-573K	5962-8978503K	•				2	100 KBd	300% min	0.5-5 mA	1500 Vdc	18V
HCPL-6730	HCPL-6731	5962-8978502	HCPL-673K	5962-8978504K				•	2	100 KBd	300% min	0.5-5 mA	1500 Vdc	18V
HCPL-6750	HCPL-6751	8302401	HCPL-675K	5962-9800201K				•	4	100 KBd	300% min	0.5-5 mA	1500 Vdc	18V

*DSCC SMD number does not include extensions for lead form and finish

Hermetically Sealed AC/DC to Logic Interface Optocouplers

Commercial Part Number	Class H	DSCC SMD Class H *	Class K	DSCC SMD Class K *	8 pin DIP	No. of Channels	Typical Data Rate	Input Threshold Current	Output Current	Withstand Test Voltage
HCPL-5760	HCPL-5761	5962-8947701	HCPL-576K	5962-8947702K	•	1	100 KHz	2.5 mA TH+	2.6 mA	1500 Vdc

*DSCC SMD number does not include extensions for lead form and finish

Hermetically Sealed Power MOSFET

Commercial Part Number	Class H	DSCC SMD Class H *	Class E	DSCC SMD Class E *	Package 8 pin DIP	No. of Channels	Output Withstand Voltage	Output On-Resistance	Maximum Load Current	Maximum Off-State Leakage	Input Current	Input/Output Insulation
HSSR-7110	HSSR-7111	5962-9314001H	HSSR-711E	5962-9314001E	•	1	90 V	1.0 Ohm	0.8 A ac 1.6 A dc	250 mA	10-20mA	1500 Vdc
—	HSSR-7112	5962-9314002H	—	—	•	1	90 V	1.0 Ohm	0.8 A ac 1.6 A dc	250 mA	5-20mA	1500 Vdc

*DSCC SMD number does not include extensions for lead form and finish

Hermetically Sealed Analog Isolation Amplifier

Commercial Part Number	Class H	DSCC SMD Class H *	Package 8 pin DIP	No. of Channels	Gain Tolerance (Max. %)	Non-Linearity (Max. %)	Prop Delay μ s (Max.)	CMR V/ μ s (Min.)	Bandwidth KHz (Typ.)	Offset mV (Typ.)
HCPL-7850	HCPL-7851	5962-9755701H	•	1	5	0.1	11	5000	100	0.6

*DSCC SMD number does not include extensions for lead form and finish

Hermetically Sealed Intelligent Power Module and Gate Drive Interface





Commercial Part Number	Class H	DSCC SMD Class H *	Class K	DSCC SMD Class K *	Package 8 pin DIP	No. of Channels	Typical Data Rate	Current Transfer Ratio	Input Current	Common Mode @ $V_{CM}=1000V$	Withstand Test Voltage
HCPL-5300	HCPL-5301	5962-9685201H	HCPL-530K	5962-9685201K	•	1	2MBd	30 % Min.	10-20 mA	10kV/ μ s	1500 Vdc

*DSCC SMD number does not include extensions for lead form and finish

Hermetically Sealed Output Current IGBT Gate Drive

Commercial Part Number	Class H	DSCC SMD Class H *	Package 8 pin DIP	No. of Channels	Peak Output Current	UVLO+	UVLO-	Input Current	Common Mode @ $V_{CM}=1000V$	Withstand Test Voltage
HCPL-5120	HCPL-5121	5962-0420401H	•	1	2.0 A	13.5V Max.	9.5V Min.	10-18 mA	10kV/ μ s	1500 Vdc
HCPL-5150	HCPL-5151	5962-0420501H	•	1	0.5 A	13.5V Max.	9.5V Min.	10-18 mA	10kV/ μ s	1500 Vdc

*DSCC SMD number does not include extensions for lead form and finish

Hermetic Optocoupler Packages			
8-Pin DIP	16-Pin DIP	20 Pad LCCC	16-Pin Flat Pack
			

Hermetic Options (available on 8 and 16 pin DIP packages)

- 100 = Butt Cut Leads (cut to just below seating plane)
- 200 = Solder Dipped Leads (solder contains lead)
- 300 = Gull Wing Lead form (solder dipped leads only)
- 600 = Crew Cut Leads (cut at the seating plane)

Optical

Integrated

Part Number
APDS-9800

Reflective

Part Number
HSDL-9100
APDS-9120

Proximity

Part Number	Pa
APDS-9700	QF

Ambient L

Part Number	Si
APDS-9002	0.8
APDS-9003	0.5
APDS-9004	1.
APDS-9005	0.5
APDS-9006	1.
APDS-9007	0.8
APDS-9008	0.5
APDS-9300	2.

For product inform

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Optical Sensors

Withstand Test Voltage	1500 Vdc
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Integrated Ambient Light and Proximity Sensors

Part Number	Size (HxWxD) (mm)	Supply Voltage (V)	Operating Temperature (°C)	ALS Output	PS Output	Detection Distance (mm)
APDS-9800	1.45 x 4.95 x 3.00	2.4 to 3.6	-40 to +85	Analog	Analog (with HI/LO digital o/p)	Near zero to 50 mm

Input/Output Insulation	1500 Vdc
10mA	1500 Vdc

Reflective Proximity Sensors

Part Number	Size (H x L x W) (mm)	Supply Voltage (V)	Operating Temperature (°C)	Output Type	Detection Distance (mm)
HSDL-9100	2.7 x 7.1 x 2.75		-40 to +85	Analog	Near zero to 60 mm
APDS-9120	1.10 x 4.40 x 4.40	2.4 to 3.6	-40 to +85	Analog (with HI/LO digital o/p)	Near zero to 50 mm

Offset mV (Typ.)	0.6
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Proximity Sensing Signal Conditioning IC

Part Number	Package Type	Operating Voltage (V)	Max ILED Pulse Width (µs)	Threshold Voltage (mV)	Features
APDS-9700	QFN 2 mm x 2 mm	2.4 to 3.6	120	600	LED Driver LED Stuck High Protection Ambient Light Immunity and Sunlight Cancellation Support detection distance up to 200mm with HSDL-9100 Can be used with Avago's HSDL-9100 or discretes

Ambient Light Photo Sensor

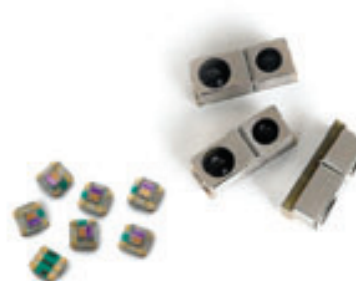
Part Number	Size (HxWxD) (mm)	Package	Supply Voltage (V)	Operating Temp. °C	Typical Output Current @ 100 Lux (µA)	Peak Wavelength (nm)
APDS-9002	0.80x 2.0 x 1.25	4 pin - ChipLED	2.4 to 5.5	-40 to +85	250	620
APDS-9003	0.55 x 1.60 x 1.5	6 pin - ChipLED	2.4 to 5.5	-40 to +85	230	620
APDS-9004	1.1 x 3.2 x 1.6	4 pin - ChipLED Reverse mounting	2.4 to 5.5	-40 to +85	230	620
APDS-9005	0.55 x 1.60 x 1.5	6 pin - ChipLED	1.8 to 5.5	-40 to +85	40	500
APDS-9006	1.1 x 3.2 x 1.6	4 pin - ChipLED Reverse mounting	2.4 to 5.5	-40 to +85	40	500
APDS-9007	0.8 x 2.4 x 2.0	6 pin - ChipLED	2.0 to 3.6	-40 to +85	30 µA at 1Klux (Logarithmic output)	560
APDS-9008	0.55x1.60x1.5	6 pin - ChipLED	1.6 to 5.5	-40 to +85	40	565
APDS-9300	2.6x2.2x0.55	6 pin - ChipLED	2.4 to 3.0	-30 to +85	I ² C Digital count output	N.A.

Withstand Test Voltage	1500 Vdc
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Withstand Test Voltage	1500 Vdc
1500 Vdc	

For product information and a complete list of distributors, please go to our web site.

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