

# Optoisolation and Optical Sensor Products



## Selection Guide 6th Edition

# Avago Optocoupler Solutions for Your Application!

## Make Your Design-Win Easy with Avago Optocouplers

Avago Technologies Optocouplers offer optical isolation solutions to many industrial and consumer applications.

Let us know your design requirements and we can support you with reference designs, system block diagrams, evaluation boards, training, product selection guidance and technical support.

Contact your Avago sales representatives now!



- ◀ Renewable Energy Power Generation
- ◀ Locomotive
- ◀ Induction Cooker
- ◀ Automotive



- ◀ Industrial Networking
- ◀ Test & Measurement
- ◀ Heating, Ventilation & Air Conditioning System
- ◀ Power System



- ◀ Medical
- ◀ Consumer Electronics
- ◀ Current Loop & Industry Process
- ◀ Industrial



- ◀ Elevators
- ◀ Battery Operated Vehicle
- ◀ Harsh Industrial
- ◀ Military/Aerospace

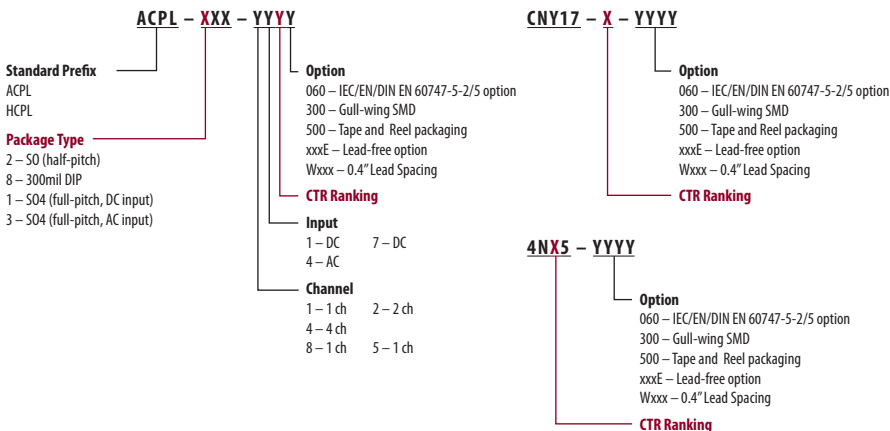
# Avago Optocoupler - Part Number & Package Nomenclature

Part Number	Package
ACNWxxxx / HCNRxxx / HCNWxxxx	8-pin DIP 400mil Widebody
ACPL-xxxJ / HCPL-xxxJ	16-pin (DTI $\geq$ 0.5mm) Jade Surface Mount (S016)
HCPL-Jxxx	8-pin (DTI $\geq$ 0.5mm) Jade DIP 300mil
ACPL-Mxxx / HCPL-Mxxx	5-pin Mini-Flat Surface Mount (S05)
ACPL-Oxxx / HCPL-Oxxx	8-pin Surface Mount (S08)
ACPL-xxxL / HCPL-xxxL	3.3V Supply Voltage
ACSL-6xxx	8-pin and 16-pin Narrowbody Surface Mount (S08/S016)
ACPL-Wxxx / ACPL-Pxxx	6-pin Stretched Surface Mount (SS06)
ACPL-Cxxx / ACPL-Hxxx / ACPL-Kxxx	8-pin Stretched Surface Mount (SS08)
ACNVxxxx*	10-pin DIP 500mil Widebody
ACML-xxxx	16-pin Widebody Surface Mount (S016) digital isolator
ACPL-xxxT	Automotive R <sup>2</sup> Coupler™ up to 125°C ops (Grade1) temp
ACPL-xxxV*	Automotive R <sup>2</sup> Coupler™ up to 105°C ops (Grade2) temp
ACPL-xxxU	Industrial R <sup>2</sup> Coupler™ up to 125°C ops temp

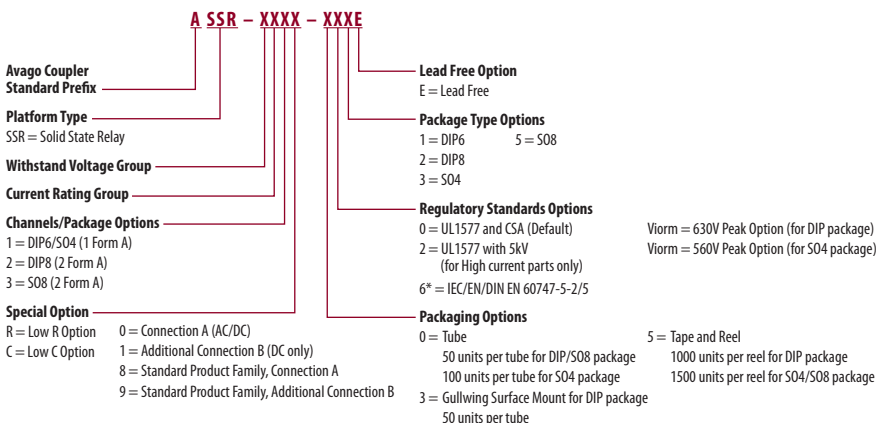
\*To be released

DTI = Distance through insulation

## Phototransistor Optocoupler – Ordering Information



## Photo MOSFET – Ordering Information



\* Option for IEC is upon request.

# Plastic Optocouplers

## Multi-Channel Bi-Directional Digital Optocoupler Product Selection

Part No.	Package	Channel	Forward Direction	Reverse Direction	$I_{F(ON)}$ mA Min.	$t_{F(LH)}$ ns Max.	$t_{F(HL)}$ ns Max.	PWD ns Max.	$t_{F(SX)}$ ns Max.	$V_{CC}$ V Min.	$V_{CC}$ V Max.	CMR - V/μs@V <sub>CM</sub>		$V_{SD}$ V <sub>RMS</sub> Min.	$V_{OHM}$ 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/5	$I_{F(ON)}$ mA Min.	Max Data Rate MBd Min.	$t_{F(LH)}$ ns Max.	$t_{F(HL)}$ ns Max.	PWD ns Max.	$t_{F(SX)}$ ns Max.	$V_{CC}$ V Min.	$V_{CC}$ V Max.	CMR - V/μs@V <sub>CM</sub>		$V_{SD}$ V <sub>RMS</sub> Min.	$V_{OHM}$ V peak
											CMR V/μs (Min.)	$V_{CM}$ V		
Single Channel CMOS Input														
ACPL-M71T-000E R <sup>2</sup> Coupler	S05	5	10	12.5	35	35	8	20	15000	1000	3750	560*		
ACPL-M72T-000E R <sup>2</sup> 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 <sup>#</sup>	630*		
HCPL-7721	300 mil DIP8	5	—	25	40	40	6	20	10000	1000	3750/5000 <sup>#</sup>	630*		
HCPL-7720	300 mil DIP8	5	—	25	40	40	8	20	10000	1000	3750/5000 <sup>#</sup>	630*		
HCPL-7723	300 mil DIP8	5	—	50	22	22	2	16	10000	1000	3750/5000 <sup>#</sup>	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<sub>RMS</sub>/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.	$t_{F(LH)}$ ns Max.	$t_{F(HL)}$ ns Max.	PWD ns Max.	$t_{F(SX)}$ ns Max.	$V_{CC}$ V Min.	$V_{CC}$ V Max.	CMR - V/μs@V <sub>CM</sub>		$V_{SD}$ V <sub>RMS</sub> Min.	$V_{OHM}$ 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 <sup>#</sup>	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<sub>RMS</sub>/1 minute Option 020, ^ - Advanced Information, may subject to changes.

## 20 Mbd Logic Gate Optocoupler Product Selection

Part No.	Package	I <sub>FRM</sub> mA Min.	t <sub>FLH</sub> ns Max.	t <sub>PLH</sub> ns Max.	PWD ns Max.	t <sub>PSK</sub> ns Max.	CMR - V/μs@V <sub>CM</sub>		V <sub>ISO</sub> V <sub>BASE</sub> Min.	V <sub>ORRM</sub> V peak
							CMR V/μs (Min.)	V <sub>CM</sub> 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 060

## 10 Mbd Logic Gate Optocoupler Product Selection

Part No.	Package	V <sub>DD</sub> V	I <sub>FRM</sub> mA Min.	t <sub>FLH</sub> ns Max.	t <sub>PLH</sub> ns Max.	PWD ns Max.	t <sub>PSK</sub> ns Max.	CMR - V/μs@V <sub>CM</sub>		V <sub>ISO</sub> V <sub>BASE</sub> Min.	V <sub>ORRM</sub> V peak
								CMR V/μs (Min.)	V <sub>CM</sub> V		
Single Channel											
6N137	300 mil DIP8	5	5	100	100	35	40	1000	10	3750/5000 <sup>‡</sup>	630*
ACNV260E-000E <sup>^</sup>	NEW 500 mil DIP	5	5	100	100	40	40	20000	1500	5000	ATEX (Certified (375V))
ACNV2601-000E <sup>^</sup>	NEW 500 mil DIP	5	5	100	100	40	40	20000	1500	7500	1768
ACPL-M60L-000E	NEW S05	3.3/5	5	90	75	25	40	15000	1000	3750	560*
ACPL-M61T-000E R <sup>2</sup> Coupler	NEW S05	5	5	100	100	35	40	15000	1000	3750	560*
ACPL-M61U-000E R <sup>2</sup> Coupler	NEW S05	5	5	100	100	35	40	15000	1000	3750	560*
ACPL-P611-000E	NEW Stretched S06	5	5	100	100	35	40	10000	1000	5000	891*
ACPL-W60L-000E	NEW Stretched S06	3.3/5	5	90	75	25	40	15000	1000	5000	1140*
ACPL-W611-000E	NEW 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 <sup>‡</sup>	630*
HCPL-261A	300 mil DIP8	5	3	100	100	45	60	1000	50	3750/5000 <sup>‡</sup>	630*
HCPL-261N	300 mil DIP8	5	3	100	100	45	60	1000	1000	3750/5000 <sup>‡</sup>	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 <sup>‡</sup>	630*
HCPL-2611	300 mil DIP8	5	5	100	100	35	40	15000	1000	3750/5000 <sup>‡</sup>	630*
HCPL-7601	300 mil DIP8	5	2	100	120	55	75	1000	50	3750/5000 <sup>‡</sup>	630*
HCPL-7611	300 mil DIP8	5	2	100	120	55	75	10000	1000	3750/5000 <sup>‡</sup>	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	NEW 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 <sup>‡</sup>	630*
HCPL-263L	300 mil DIP8	3.3/5	5	90	75	25	40	15000	1000	3750/5000 <sup>‡</sup>	630*
HCPL-263N	300 mil DIP8	5	3	100	100	45	60	15000	1000	3750/5000 <sup>‡</sup>	630*
HCPL-2630	300 mil DIP8	5	5	100	100	35	40	5000	1000	3750/5000 <sup>‡</sup>	630*
HCPL-2631	300 mil DIP8	5	5	100	100	35	40	10000	1000	3750/5000 <sup>‡</sup>	630*
HCPL-4661	300 mil DIP8	5	5	100	100	35	40	15000	1000	3750/5000 <sup>‡</sup>	630*

Notes: \* - with IEC/EN/DIN EN 60747-5-2/5 Option 060, <sup>‡</sup> - with UL 5000V<sub>RMS</sub>/1 minute Option 020, <sup>^</sup> - Advanced information, may subject to changes.

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

Part No.	Package	V <sub>DD</sub> V	I <sub>ION</sub> mA Min.	Max Data Rate MBd Min.	t <sub>PLH</sub> ns Max.	t <sub>FHL</sub> ns Max.	PWD ns Max.	t <sub>PSK</sub> ns Max.	CMR - V/μs@V <sub>CM</sub>		V <sub>ISO</sub> V <sub>RMS</sub> Min.	V <sub>ORRM</sub> V peak
									CMR V/μs (Min.)	V <sub>CM</sub> V		
Single Channel LED Input												
ACPL-061L-000E <sup>NEW</sup>	S08	3.3/5	1.6	10	80	80	30	30	20000	1000	3750	560*
ACPL-M61L-000E <sup>NEW</sup>	S05	3.3/5	1.6	10	80	80	30	30	20000	1000	3750	560*
ACPL-W61L-000E <sup>NEW</sup>	Stretched S06	3.3/5	1.6	10	80	80	30	30	20000	1000	5000	1140*
Dual Channel LED Input												
ACPL-064L-000E <sup>NEW</sup>	S08	3.3/5	1.6	10	80	80	30	30	20000	1000	3750	560*
ACPL-K64L-000E <sup>NEW</sup>	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<sub>RMS</sub>/1 minute Option 020, ^ - Advanced Information, may subject to changes.

## 8 MBd Logic Gate Optocoupler Product Selection

Part No.	Package	I <sub>ION</sub> mA Min.	t <sub>PLH</sub> μs Max.	t <sub>FHL</sub> μs Max.	CMR - V/μs@V <sub>CM</sub>		V <sub>ISO</sub> V <sub>RMS</sub> Min.	V <sub>ORRM</sub> V peak
					CMR V/μs (Min.)	V <sub>CM</sub> 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 <sub>ION</sub> mA Min.	t <sub>PLH</sub> μs Max.	t <sub>FHL</sub> μs Max.	CMR - V/μs@V <sub>CM</sub>		V <sub>ISO</sub> V <sub>RMS</sub> Min.	V <sub>ORRM</sub> V peak
					CMR V/μs (Min.)	V <sub>CM</sub> 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 <sub>DD</sub> V	I <sub>F(ON)</sub> mA Min.	CTR			t <sub>PLH</sub> μs Max.	t <sub>FHL</sub> μs Max.	CMR - V/μs@V <sub>CM</sub>		V <sub>ISO</sub> V <sub>RMS</sub> Min.	V <sub>ORM</sub> V peak
				% Min.	% Max.	I <sub>F</sub> mA			CMR V/μs (Min.)	V <sub>CM</sub> V		
Single Channel												
ACPL-M50L-000E <b>NEW</b>	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*
HCN135	400 mil DIP8	5	16	5	—	16	2.0	2.0	1000	10	5000	1414
HCN136	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<sub>RMS</sub>/1 minute Option 020, ^ - Advanced information, may subject to changes.

## 100 kbd Darlington Transistor Output Optocoupler Product Selection

Part No.	Package	V <sub>DD</sub> V	I <sub>F(ON)</sub> mA Min.	CTR			t <sub>PLH</sub> μs Max.	t <sub>FHL</sub> μs Max.	CMR - V/μs@V <sub>CM</sub>		V <sub>ISO</sub> V <sub>RMS</sub> Min.	V <sub>ORM</sub> V peak
				% Min.	% Max.	I <sub>F</sub> mA			CMR V/μs (Min.)	V <sub>CM</sub> 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*
HCN138	400 mil DIP8	5	0.5	300	—	1.6	70	11	1000	10	5000	1414
HCN139	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<sub>RMS</sub>/1 minute Option 020

## Automotive 10Mbps Logic Gate R<sup>2</sup>Coupler™ Product Selection

Part No.	Package	Operating Temperature °C	I <sub>FD(ON)</sub> mA Min.	t <sub>PLH</sub> ns Max.	t <sub>PHL</sub> ns Max.	PWD ns Max.	t <sub>PSK</sub> ns Max.	CMR - V/μs@V <sub>CM</sub>		V <sub>SD</sub> V <sub>RMS</sub> Min.	V <sub>ORM</sub> V peak
								CMR V/μs (Min.)	V <sub>CM</sub> 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 R<sup>2</sup>Coupler™ Product Selection

Part No.	Package	Operating Temperature °C	V <sub>DD</sub> V	I <sub>FD(ON)</sub> mA Min.	Max Data Rate MbD Min.	t <sub>PLH</sub> ns Max.	t <sub>PHL</sub> ns Max.	PWD ns Max.	t <sub>PSK</sub> ns Max.	CMR - V/μs@V <sub>CM</sub>		V <sub>SD</sub> V <sub>RMS</sub> Min.	V <sub>ORM</sub> V peak
										CMR V/μs (Min.)	V <sub>CM</sub> 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 R<sup>2</sup>Coupler™ Product Selection

Part No.	Package	Operating Temperature °C	I <sub>F</sub> mA	CTR		t <sub>PLH</sub> μs Max.	t <sub>PHL</sub> μs Max.	CMR - V/μs@V <sub>CM</sub>		V <sub>SD</sub> V <sub>RMS</sub> Min.	V <sub>ORM</sub> V peak
				% Min.	% Max.			CMR V/μs (Min.)	V <sub>CM</sub> 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 R<sup>2</sup>Coupler™ Product Selection

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

## Automotive Gate Drive R<sup>2</sup>Coupler™ Product Selection

Part No.	Package	Operating Temperature °C	I <sub>FD(ON)</sub> mA Min.	I <sub>OUT</sub> A Min.	t <sub>PLH</sub> μs Max.	t <sub>PHL</sub> μs Max.	PDD μs Max.	V <sub>CC</sub> V Max.	CMR - V/μs@V <sub>CM</sub>		V <sub>SD</sub> V <sub>RMS</sub> Min.	V <sub>ORM</sub> V peak
									CMR V/μs (Min.)	V <sub>CM</sub> 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 <sup>^</sup>	S016	-40 to 125	—	2.5	0.5	0.5	0.35	30	15000	1500	3750	891

<sup>^</sup> - Advanced information, may subject to changes.




## Automotive Low Speed R<sup>2</sup>Coupler™ Product Selection

Part No.	Package	Operating Temperature °C	I <sub>FD(ON)</sub> mA Min.	CTR		t <sub>ON</sub> μs Max.	t <sub>OFF</sub> μs Min.	CMR - V/μs@V <sub>CM</sub>		V <sub>SD</sub> V <sub>RMS</sub> Min.	V <sub>ORM</sub> V peak
				% Min.	% Min.			CMR V/μs (Min.)	V <sub>CM</sub> V		
ACPL-M27T-000E <sup>^</sup>	S04	-40 to 125	5	TBD	600	TBD	TBD	10,000	1000	3750	—
ACPL-M27V-000E <sup>^</sup>	S04	-40 to 105	5	TBD	600	TBD	TBD	10,000	1000	3750	—




<sup>^</sup> - Advanced information, may subject to changes.



Extended Temperature R<sup>2</sup>Coupler™ Product Selection









Part No.	Package	Operating Temperature °C	I <sub>sat</sub> A (MAX)	I <sub>typ</sub> mA	CTR		t <sub>FLH</sub> μs Max.	t <sub>FHL</sub> μs Max.	PWD ns Max.	t <sub>PSR</sub> ns Max.	CMR - V/μs@V <sub>CM</sub>		V <sub>ISO</sub> V <sub>RMS</sub> Min.	V <sub>ORM</sub> V peak
					% Min.	% Max.					CMR V/μs (Min.)	V <sub>CM</sub> 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 MBdMin.	t <sub>FLH</sub> & t <sub>FHL</sub> (V <sub>CC</sub> =5.0V) ns Max.	t <sub>FLH</sub> & t <sub>FHL</sub> (V <sub>CC</sub> =3.3V) ns Max.	PWD ns Max.	t <sub>PSR</sub> ns Max.	CMR - V/μs@V <sub>CM</sub>		V <sub>ISO</sub> V <sub>RMS</sub> Min.
								CMR V/μs (Min.)	V <sub>CM</sub> V	
ACML-7400-000E <sup>^</sup> 	Quad	S016 Wide Body	100	15	18	3	6	25000	1000	5000
ACML-7410-000E <sup>^</sup> 	Quad, 3/1, Bi-dir	S016 Wide Body	100	35	40	3	6	25000	1000	5000
ACML-7420-000E <sup>^</sup> 	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-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-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



<sup>^</sup> - 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 <sub>DD2</sub> V	CMR - V/μs@V <sub>CM</sub>		Output Configuration	V <sub>ISO</sub> V <sub>RMS</sub> Min.	V <sub>OSRM</sub> V peak
							CMR V/μs (Typ.)	V <sub>CM</sub> 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 <sup>^</sup> 	Stretched S08	-40 to +105	±0.5	0.0037	200	3 - 5.5	15000	1000	Differential	5000	1140*
ACPL-C793-000E <sup>^</sup> 	Stretched S08	-40 to +105	±1	0.0037	200	3 - 5.5	15000	1000	Differential	5000	1140*
ACPL-C795-000E <sup>^</sup> 	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/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 <sub>DD2</sub> V	CMR - V/μs@V <sub>CM</sub>		Clock MHz Typ.	V <sub>ISO</sub> V <sub>RMS</sub> Min.	V <sub>OSRM</sub> V peak
							CMR V/μs (Typ.)	V <sub>CM</sub> V			
ACPL-796J-000E 	S016	-40 to +105	±1	3	12	3 - 5.5	25000	1000	5 - 20, External	5000	1140*
ACPL-C797-000E <sup>^</sup> 	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/DIN EN 60747-5-2/5 Option 060, ^ - Advanced Information, may subject to changes, ~ - V<sub>DD</sub>

## Integrated Gate Drive Optocoupler Product Selection

Part No.	Package	$I_{(on)}$ mA Min.	$I_{out}$ A Min.	$I_{out}$ A Max.	$t_{rLH}$ $\mu$ s Max.	$t_{FHL}$ $\mu$ s Max.	PDD $\mu$ s Max.	$V_{CC}$ V Max.	CMR - V/ $\mu$ s@ $V_{CM}$		$V_{DD}$ $V_{BMS}$ Min.	$V_{ORH}$ V peak
									CMR V/ $\mu$ s (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-330J-000E	300 mil DIP8	7	2.0	2.5	0.5	0.5	0.35	30	40000	1500	3750	630*
ACPL-330J-000E	S016	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	S016	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	S016	-	2.0	2.5	0.5	0.5	-	30	15000	1500	3750	891
ACPL-H312-000E	Stretched S08	7	2.0	2.5	0.5	0.5	0.35	30	15000	1500	3750	891*
ACPL-H342-000E	Stretched S08	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 S08	7	2.0	2.5	0.5	0.5	0.35	30	15000	1500	5000	1140*
ACPL-K342-000E	Stretched S08	7	2.0	2.5	0.5	0.25	-0.2	30	25000	1500	5000	1140*
ACPL-P302-000E	Stretched S06	7	0.2	0.4	0.7	0.7	0.5	30	10000	1000	3750	891*
ACPL-P314-000E	Stretched S06	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 S06	7	0.2	0.4	0.7	0.7	0.5	30	10000	1000	3750	1140*
ACPL-W314-000E	Stretched S06	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	S08	7	0.2	0.4	0.7	0.7	0.5	30	10000	1000	3750	566*
HCPL-0314	S08	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	S016	-	2.0	2.5	0.5	0.5	0.3	30	15000	1500	3750	891
HCPL-3180	- 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	S016	8	0.4	0.6	0.7	0.7	0.5	30	25000	1500	3750	891
HCPL-315J	S016	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 <sub>IO</sub> mA Min.	CTR		I <sub>T</sub> mA	t <sub>TR</sub> µs Max.	t <sub>ML</sub> µs Max.	PDD µs Max.	CMR - V/µs@V <sub>CM</sub>		V <sub>DD</sub> V <sub>RMS</sub> Min.	V <sub>ORM</sub> V peak
			% Min.	% Max.					CMR V/µs (Min.)	V <sub>CM</sub> V		
Single Channel												
ACPL-4800-000E	NEW 300 mil DIP8	6	—	—	—	0.35	0.35	0.25	30000	1000	3750	630*
ACPL-K453-000E	NEW Stretched S08	16	19	50	16	1.00	1.00	1.00	15000	1500	5000	1140*
ACPL-M43T-000E R <sup>2</sup> Coupler	NEW S05	10	32	80	10	1.0	1.0	0.9	15000	1500	3750	—
ACPL-M43U-000E R <sup>2</sup> Coupler	NEW S05	10	32	80	10	1	1	0.9	15000	1000	3750	—
ACPL-M46T-000E R <sup>2</sup> Coupler	NEW S05	10	44	90	10	0.55	0.55	0.45	15000	1500	3750	—
ACPL-M46U-000E R <sup>2</sup> Coupler	NEW S05	10	44	90	10	0.4	0.55	0.45	15000	1000	3750	—
ACPL-P454-000E	NEW Stretched S06	12	26	65	12	1.14	1.00	1.30	15000	1500	3750/5000 <sup>#</sup>	891*
ACPL-P456-000E	NEW Stretched S06	10	44	>90	10	0.55	0.45	0.45	15000	1500	3750	891*
ACPL-P480-000E	NEW Stretched S06	6	—	—	—	0.35	0.35	0.25	20000	1000	3750	891*
ACPL-P481-000E	NEW Stretched S06	6	—	—	—	0.35	0.35	0.25	20000	1000	3750	891*
ACPL-W454-000E	NEW Stretched S06	12	26	65	12	1.14	1.00	1.30	15000	1500	5000	1140*
ACPL-W456-000E	NEW Stretched S06	10	44	>90	10	0.55	0.45	0.45	15000	1500	5000	1140*
ACPL-W481-000E	NEW 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 <sup>#</sup>	630*
HCPL-4503	300 mil DIP8	16	19	50	16	1.0	1.0	1.0	15000	1500	3750/5000 <sup>#</sup>	630*
HCPL-4504	300 mil DIP8	12	26	65	12	1.4	1.0	1.3	15000	1500	3750/5000 <sup>#</sup>	630*
HCPL-4506	300 mil DIP8	10	44	>90	10	0.55	0.40	0.45	15000	1500	3750/5000 <sup>#</sup>	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 <sup>#</sup>	630*

Notes: \* - with IEC/EN/DIN EN 60747-5-2/5 Option 060, # - with UL 5000V<sub>RMS</sub>/1 minute Option 020

## Isolated Line Receiver Product Selection



Part No.	Package	Output Collector Output mA Max.	t <sub>TR</sub> µs Max.	t <sub>ML</sub> µs Max.	CMR - V/µs@V <sub>CM</sub>		V <sub>DD</sub> V <sub>RMS</sub> Min.
					CMR V/µs (Min.)	V <sub>CM</sub> 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)	$t_{RHL}$ $\mu$ s Max.	$t_{FHL}$ $\mu$ s Max.	CMR - V/ $\mu$ s@V <sub>CM</sub>		V <sub>DD</sub> V <sub>RMS</sub> Min.
					CMR V/ $\mu$ s (Min.)	V <sub>CM</sub> V	
<b>Transmitter</b>							
HCPL-4100	300 mil DIP8	20 (400)	1.6	1.0	1000	50	3750
CMOS compatible data input for HCPL-4100							
<b>Receiver</b>							
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.	$t_{PLH}$ $\mu$ s Max.	$t_{PHL}$ $\mu$ s Max.	CMR - V/ $\mu$ s@V <sub>CM</sub>		V <sub>DD</sub> V <sub>RMS</sub> Min.	V <sub>DRM</sub> V <sub>PEAK</sub>
		mA					CMR V/ $\mu$ s (Min.)	V <sub>CM</sub> V		
		Min.	Max.							
ACPL-K370-000E 	Stretched SO8	1.96	3.11	1.2	40	15	600	140	5000	1140*
ACPL-K376-000E 	Stretched SO8	0.87	1.56	0.6	40	15	600	140	5000	1140*
HCPL-0370	SO8	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 <sub>DD</sub> V <sub>RMS</sub> Min.	V <sub>DRM</sub> 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 <sub>DD</sub> V <sub>RMS</sub> Min.	V <sub>DRM</sub> V peak
HCPL-4562	300 mil DIP8	17	0.25	45	122	3750/5000 <sup>†</sup>	630*
0.3% / °C gain temperature coefficient							

Notes: \* - with IEC/EN/DIN EN 60747-5-2/5 Option 060, <sup>†</sup> - with UL 5000V<sub>RMS</sub>/1 minute Option 020

## General Purpose Phototransistor Optocoupler – DC Input Product Selection

Part No.	Package	Absolute Max. $I_f$ mA	CTR				$V_{CE(sat)}$			$t_r/t_f$ $\mu$ s typ	$BV_{CEO}$ V Min.	$V_f$		$V_{SD}$ V Max.	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 <sup>§</sup>	S04	50	50	600	5	5	0.4	8	2.4	2/3	80	1.4	20	3000	1
HCPL-181-000E <sup>¶</sup>	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*	S08	50	50	600	5	5	0.4	8	2.4	2/3	80	1.3	20	3000	1
ACPL-827-000E <sup>®</sup>	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	S016	50	50	600	5	5	0.4	8	2.4	2/3	80	1.3	20	3000	1
ACPL-847-000E	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				$V_{CE(sat)}$			$t_r/t_f$ $\mu$ s typ	$BV_{CEO}$ V Min.	$V_f$		$V_{SD}$ V Max.	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 <sup>‡</sup>	S04	+/-50	20	400	$\pm$ 5	5	0.4	$\pm$ 8	2.4	2/3	80	1.4	$\pm$ 20	3000	1
HCPL-354-000E	S04	+/-50	20	400	$\pm$ 1	5	0.2	$\pm$ 20	1	4/3	35	1.4	$\pm$ 20	3750	1
HCPL-354-00AE	S04	+/-50	50	150	$\pm$ 1	5	0.2	$\pm$ 20	1	4/3	35	1.4	$\pm$ 20	3750	1
HCPL-814-000E	300 mil DIP4	+/-50	20	300	$\pm$ 1	5	0.2	$\pm$ 20	1	4/3	35	1.4	$\pm$ 20	5000	1/2/3
HCPL-814-00AE	300 mil DIP4	+/-50	50	150	$\pm$ 1	5	0.2	$\pm$ 20	1	4/3	35	1.4	$\pm$ 20	5000	1/2/3
Dual Channel-8 pin															
ACPL-224-500E	S08	+/-50	20	400	$\pm$ 1	5	0.4	$\pm$ 8	2.4	2/3	80	1.4	$\pm$ 20	3000	1
ACPL-824-000E	300 mil DIP8	+/-50	20	300	$\pm$ 1	5	0.2	$\pm$ 20	1	4/3	70	1.4	$\pm$ 20	5000	1/2/3
Quad Channel-16 pin															
ACPL-244-500E	S016	+/-50	20	400	$\pm$ 1	5	0.4	$\pm$ 8	2.4	2/3	80	1.4	$\pm$ 20	3000	1
ACPL-844-000E	300 mil DIP16	+/-50	20	300	$\pm$ 1	5	0.2	$\pm$ 20	1	4/3	70	1.4	$\pm$ 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, <sup>¶</sup> - CTR rank with option 000E, 00AE, 00BE, 00CE and 00DE available

<sup>®</sup> CTR rank with Option 000E, 00BE and 00CE available

<sup>§</sup> CTR rank with option 500E, 50AE, 50BE, 50CE and 50DE available,

<sup>‡</sup> CTR rank with option 500E, 50BE, 50CE

<sup>‡</sup> - CTR rank with option 500E and 50AE available.

## Solid State Relay (Photo MOSFET) Product Selection

Part No.	Function	Package	Channel & Output Type	V <sub>ISO</sub> kV Min.	V <sub>(OFF)</sub> V Min.	I <sub>O</sub> A Max.	I <sub>(OFF)</sub> mA Max.	C <sub>(OFF)</sub> pF Max.	R <sub>(ON)</sub> Ω Max.	T <sub>ON</sub> ms Max.	T <sub>OFF</sub> 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<sub>(OFF)</sub> × R<sub>(ON)</sub>, HC = High Current, STD = Standard









## Solid State Relay (Photovoltaic Driver) Product Selection

Part No.	Function	Package	Channel & Output Type	V <sub>OC</sub> V Min.	I <sub>C</sub> μA Min.	V <sub>ISO</sub> 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 <sub>O</sub> A <sub>APP</sub> Typ.	Harmonic Distortion dBc Max.		Isolation	V <sub>CC</sub> V Typ.	V <sub>ISO</sub> V <sub>RMS</sub> Min.	V <sub>FORM</sub> 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 <sub>form</sub> (V <sub>peak</sub> )	UL 1577 V <sub>iso</sub> (V <sub>rms</sub> )
S05		5.0	5.0	0.08	560	3750
		8.0	7.0	0.08	891	3750
Stretched S06#		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
		8.0	7.0	0.08	891	3750
Stretched S08#		8.0	8.0	0.08	1140	5000
		8.0	8.0	0.5	1140	5000

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

	Package	Creepage (mm)	Clearance (mm)	Internal Clearance (mm)	IEC/EN/DIN EN 60747-5-2/5 V <sub>form</sub> (V <sub>peak</sub> )	UL 1577 V <sub>iso</sub> (V <sub>rms</sub> )
S016		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
Wide Body**		10.0	9.6	1.0	1414	5000
		13.0	12.8	2.0	1768	7500

Advanced information, subject to change

\*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 <sub>form</sub> (V <sub>peak</sub> )	UL 1577 V <sub>iso</sub> (V <sub>rms</sub> )
<b>S04</b>		4.9	4.9	0.08	-	3750
<b>6-Pin**</b>		7.4	7.1	0.08	-	3750
<b>8-Pin**</b>		7.4	7.1	0.08	-	3750
<b>S08</b>		4.9	4.8	0.08	-	3750

	Package	Creepage (mm)	Clearance (mm)	Internal Clearance (mm)	IEC/EN/DIN EN 60747-5-2/5 V <sub>form</sub> (V <sub>peak</sub> )	UL 1577 V <sub>iso</sub> (V <sub>rms</sub> )
<b>S04</b>		4.9	4.9	0.4	565	3000
		4.9	4.9	0.4	565	3750
<b>S08</b>		4.9	4.9	0.4	565	3000
		4.9	4.9	0.4	565	3000
<b>4-Pin**</b>		8.0	7.6	0.4	850	5000
		8.0	7.6	0.4	850	2500 to 5000
<b>8-Pin**</b>		8.0	7.6	0.4	850	5000
		8.0	7.6	0.4	850	5000

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

## Digital Isolator

	Package	Creepage (mm)	Clearance (mm)	Internal Clearance (mm)	IEC/EN/DIN EN 60747-5-2/5 V <sub>form</sub> (V <sub>peak</sub> )	UL 1577 V <sub>iso</sub> (V <sub>rms</sub> )
<b>S08*</b>		4.0	4.0	-	-	2500
<b>S016*</b>		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 @ $V_{CE} = -50V$	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/ $\mu$ s	10 mA	1500 Vdc	5.5V
ACPL-2670L	ACPL-2672L	5962-0824203H	ACPL-268KL	5962-0824203K	-	*			2	10MBd	1000V/ $\mu$ s	10 mA	1500 Vdc	3.3V
ACPL-5600L	ACPL-5601L	5962-0824201H	ACPL-560KL	5962-0824201K	*				1	10MBd	1000V/ $\mu$ s	10 mA	1500 Vdc	3.3V
ACPL-5630L	ACPL-5631L	5962-0824202H	ACPL-563KL	5962-0824202K	*				2	10MBd	1000V/ $\mu$ s	10 mA	1500 Vdc	3.3V
HCPL-1930	HCPL-1931	5962-8957201	HCPL-193K	5962-8957202K	*	*			2	10MBd	1000V/ $\mu$ s	10 mA	1500 Vdc	5.5V
HCPL-5200	HCPL-5201	5962-8876801	HCPL-520K	5962-8876802K	*				1	5MBd	1000V/ $\mu$ s	2-8 mA	1500 Vdc	20V
HCPL-5230	HCPL-5231	5962-8876901	HCPL-523K	5962-8876904K	*				2	5MBd	1000V/ $\mu$ s	2-8 mA	1500 Vdc	20V
HCPL-5400	HCPL-5401	5962-8957001	HCPL-540K	5962-8957002K	*				1	20MBd	500V/ $\mu$ s	6-10 mA	1500 Vdc	5.25V
HCPL-5430	HCPL-5431	5962-8957101	HCPL-543K	5962-8957103K	*				2	20MBd	500V/ $\mu$ s	6-10 mA	1500 Vdc	5.25V
HCPL-5600	HCPL-5601	5962-9085501H	HCPL-560K	5962-9085501K	*				1	10MBd	1000V/ $\mu$ s	10 mA	1500 Vdc	5.5V
HCPL-5630	HCPL-5631	8102802	HCPL-563K	5962-9800102K	*				2	10MBd	1000V/ $\mu$ s	10 mA	1500 Vdc	5.5V
HCPL-5650	HCPL-5651	8102805	—	—	*				2	10MBd	1000V/ $\mu$ s	10 mA	2500 Vdc	5.5V
HCPL-6230	HCPL-6231	5962-8876902	HCPL-623K	5962-8876905K	*		*		2	5MBd	1000V/ $\mu$ s	2-8 mA	1500 Vdc	20V
HCPL-6250	HCPL-6251	5962-8876903	HCPL-625K	5962-8876906K	*		*		4	5MBd	1000V/ $\mu$ s	2-8 mA	1500 Vdc	20V
HCPL-6430	HCPL-6431	5962-8957102	HCPL-643K	5962-8957104K	*		*		2	20MBd	500V/ $\mu$ s	6-10 mA	1500 Vdc	5.25V
HCPL-6630	HCPL-6631	8102803	HCPL-663K	5962-9800103K	*		*		2	10MBd	1000V/ $\mu$ s	10 mA	1500 Vdc	5.5V
HCPL-6650	HCPL-6651	8102804	HCPL-665K	5962-9800104K	*		*		4	10MBd	1000V/ $\mu$ s	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	90V	1.0 Ohm	0.8 A ac 1.6 A dc	250 mA	10-20mA	1500 Vdc
-	HSSR-7112	5962-9314002H	-	-	•	1	90V	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 $\mu$ s (Max.)	CMR V/ $\mu$ 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 @ $V_{ce}=1000V$	Withstand Test Voltage
HCPL-5300	HCPL-5301	5962-9685201H	HCPL-530K	5962-9685201K	•	1	2MBd	30 % Min.	10-20 mA	10kV/ $\mu$ 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 @ $V_{ce}=1000V$	Withstand Test Voltage
HCPL-5120	HCPL-5121	5962-0420401H	•	1	2.0 A	13.5V Max.	9.5V Min.	10-18 mA	10kV/ $\mu$ s	1500 Vdc
HCPL-5150	HCPL-5151	5962-0420501H	•	1	0.5 A	13.5V Max.	9.5V Min.	10-18 mA	10kV/ $\mu$ 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 Sensors

## 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

## 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

## 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 <sup>2</sup> C Digital count output	N.A.