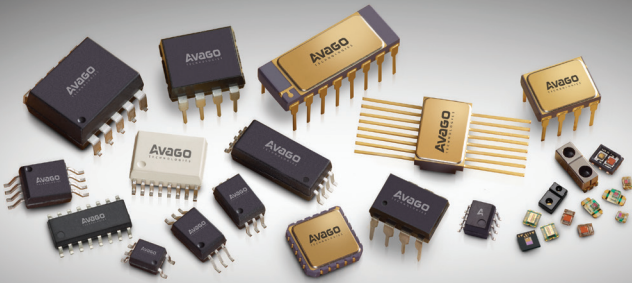


# Optoisolation and Optical Sensor Products



**Selection Guide**

# Avago Optocoupler Solutions for Your Application!

## Make Your Design Easy with Avago Optocouplers

Avago Technologies Optocouplers offer optical isolation solutions to many industrial, consumer, military, and aerospace 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
- Energy Storage System
- Electric Vehicle Charging
- Locomotive
- Induction Cooker
- Industrial Networking
- Test & Measurement
- Heating, Ventilation & Air conditioning System
- Power System
- Medical
- Consumer Electronics
- Current Loop & Industry Process
- Industrial and Servo Drives
- Elevators
- Battery Operated Vehicle
- Harsh Industrial
- Military/Aerospace

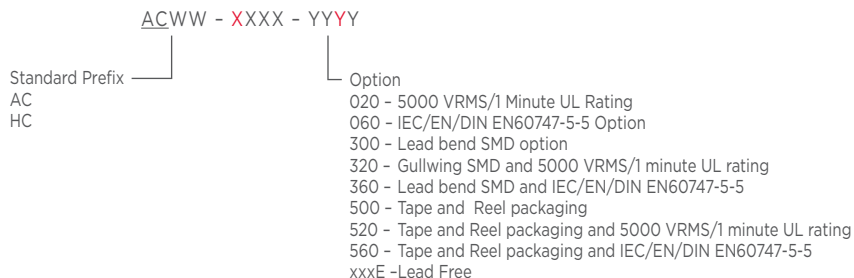
## Avago Optocoupler – Part Number & Package Nomenclature

Part Number	Package
ACFL-xxxx	12-pin Fine-Pitch Stretched Surface Mount (SSO12)
ACNT-Hxxxx	8-pin 14.2mm Stretched Surface Mount
ACNVxxxx	10-pin DIP 500mil Widebody
ACNWxxxx / HCNRxxx / HCNWxxxx	8-pin DIP 400mil Widebody
ACPL-xxxJ / HCPL-xxxJ	16-pin (DTI ≥ 0.5mm) Jade Surface Mount (SO16)
HCPL-Jxxx	8-pin (DTI ≥ 0.5mm) Jade DIP 300mil
ACPL-Mxxx / HCPL-Mxxx	5-pin Mini-Flat Surface Mount (SO5)
ACPL-0xxx / HCPL-0xxx	8-pin Surface Mount (SO8)
ACPL-Wxxx / ACPL-Pxxx	6-pin Stretched Surface Mount (SSO6)
ACPL-Cxxx / ACPL-Hxxx / ACPL-Kxxx	8-pin Stretched Surface Mount (SSO8)
ACPL-xxxL / HCPL-xxxL	3.3V Supply Voltage
ACPL-xxxx / ACPL-Txxx / HCPL-xxxx	8-pin DIP 300mil
ACSL-6xxx	8-pin and 16-pin Narrowbody Surface Mount (SO8/SO16)
ACML-xxxx	16-pin Widebody Surface Mount (SO16) 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

## Avago Optocoupler Ordering Information

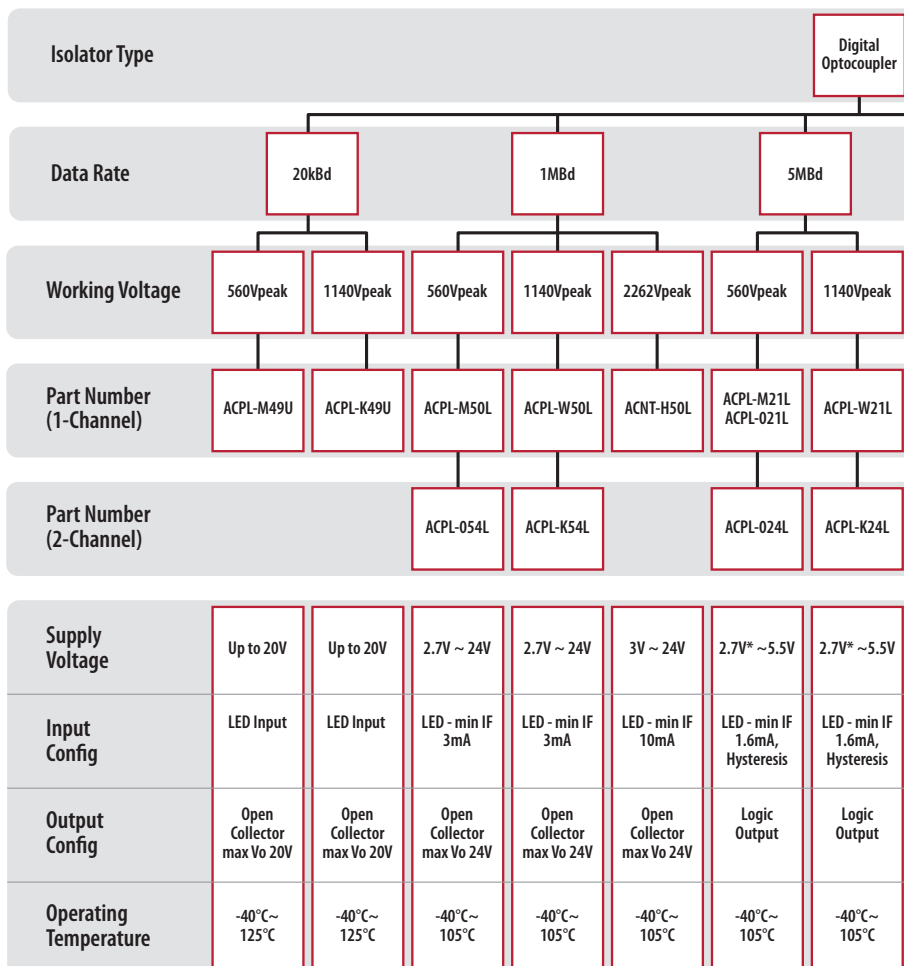


Note 1: Option "xxxE" is available together with other options, for example option "560E" means "Tape and Reel Packaging, IEC/EN/DIN EN60747 5-5 and Lead Free".

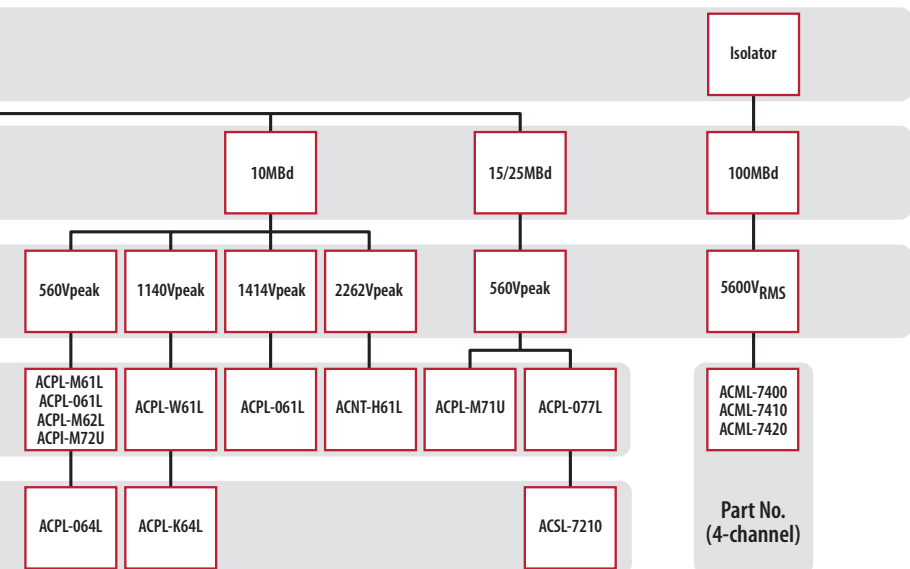
Note 2: For codes not listed in the figures above, please refer to the respective data sheet or contact your nearest Avago Technologies representative for details.

# Product Selection Trees

## Digital Optocoupler NPI Product Tree



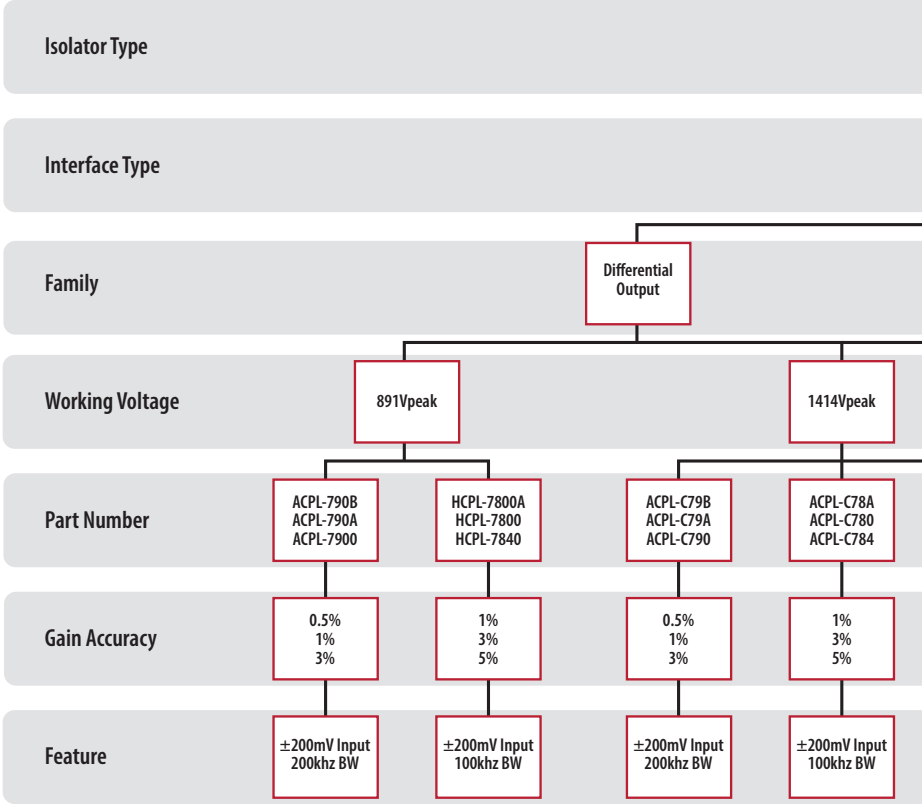
\* - 2.5V option available

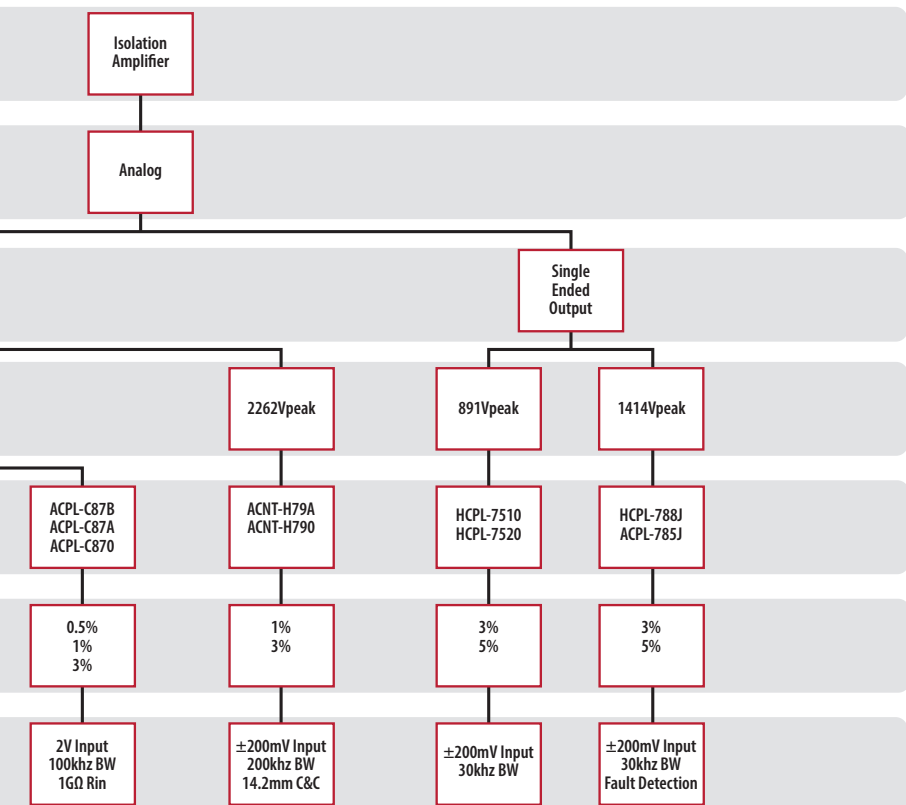


2.7V ~ 5.5V	2.7V ~ 5.5V	2.7V ~ 5.5V	2.7V ~ 5.5V	3V ~ 5.5V	3V ~ 5.5V	3V ~ 5.5V
LED - min IF 1.6 / 4mA	LED - min IF 1.6mA	LED - min IF 1.6mA	LED - min IF 4.5mA	LED - min IF 4mA	Logic Input	Logic Input
Logic / Open Drain	Logic Output	Logic Output	Logic Output	Logic Output	Logic Output	Logic Output
-40°C~ 105 / 125°C	-40°C~ 105°C	-40°C~ 105°C	-40°C~ 105°C	-40°C~ 125°C	-40°C~ 105°C	-40°C~ 105°C

# Product Selection Trees

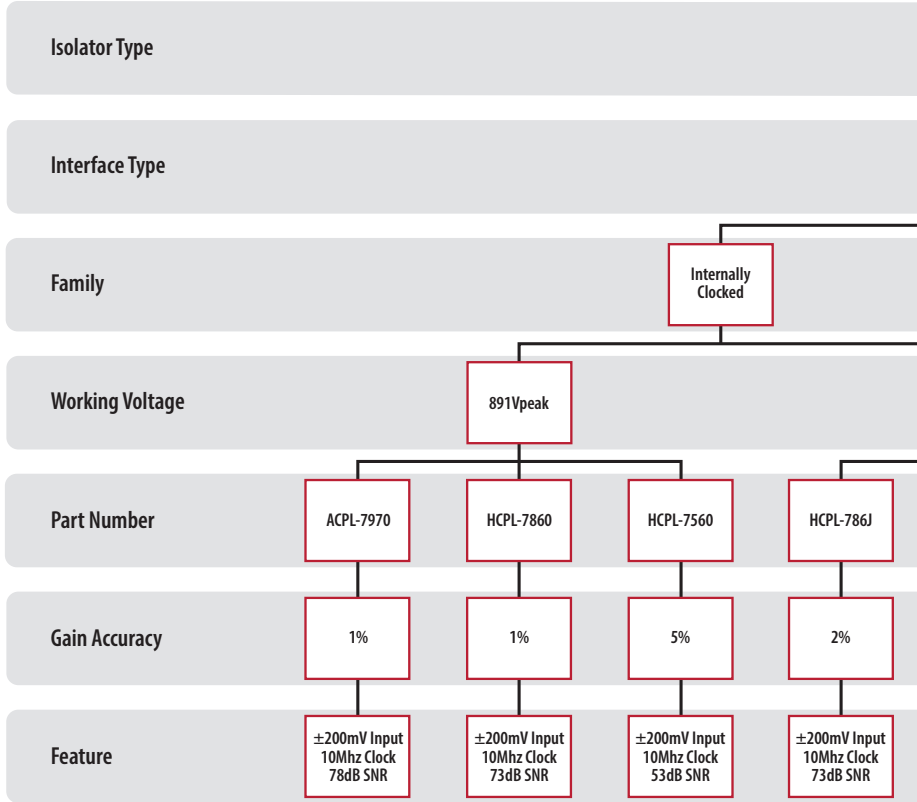
## Isolation Amplifier Product Tree





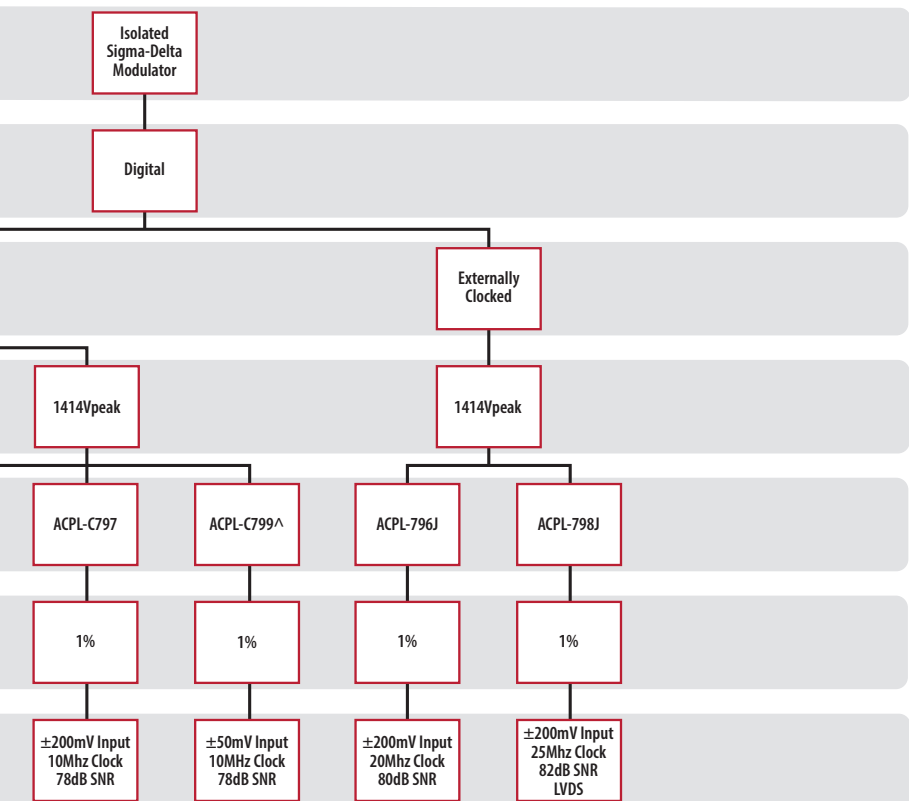
# Product Selection Trees

## Isolated Sigma-Delta Modulator Product Tree



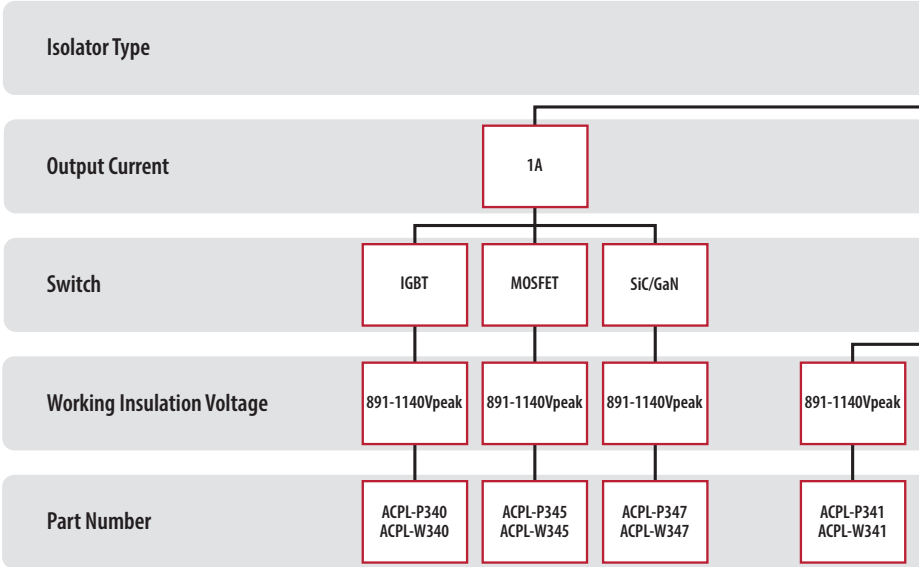
Note: ^ - Advanced information, may be subject to changes.

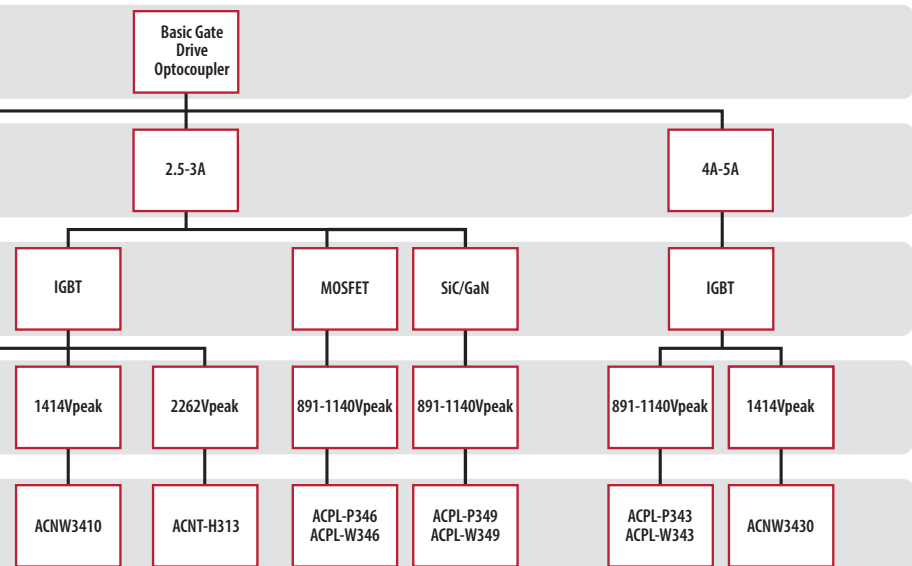




# Product Selection Trees

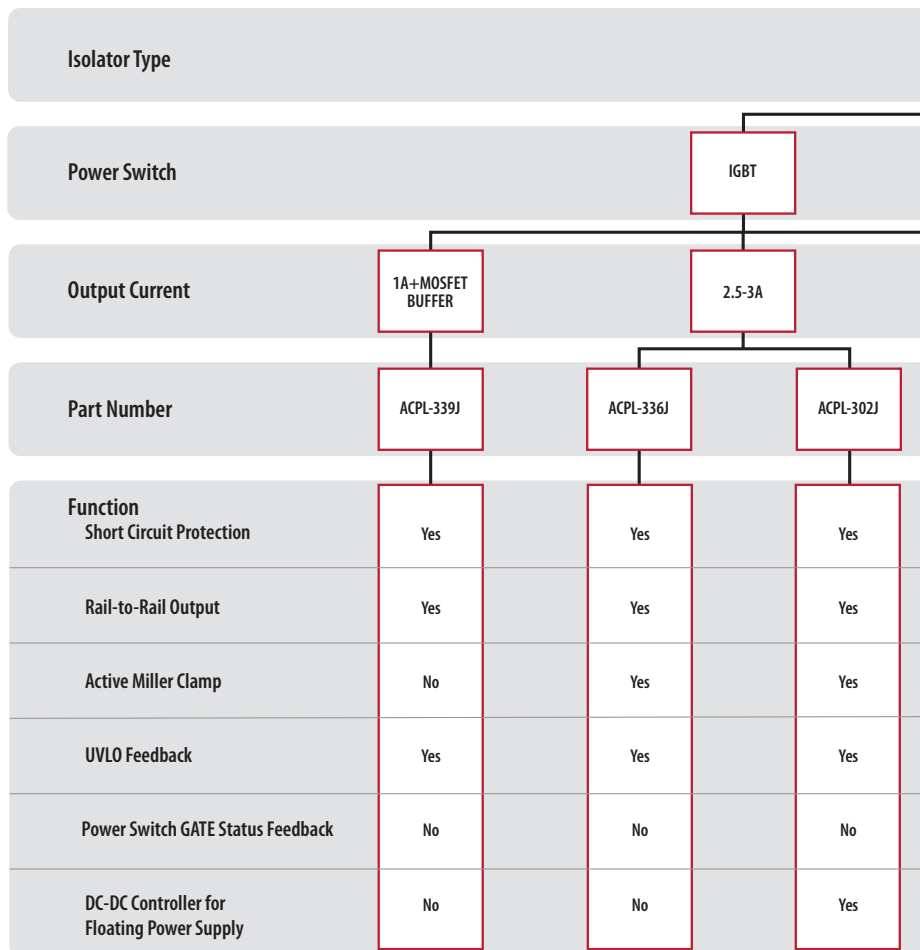
## Basic Gate Drive Optocoupler NPI Product Tree

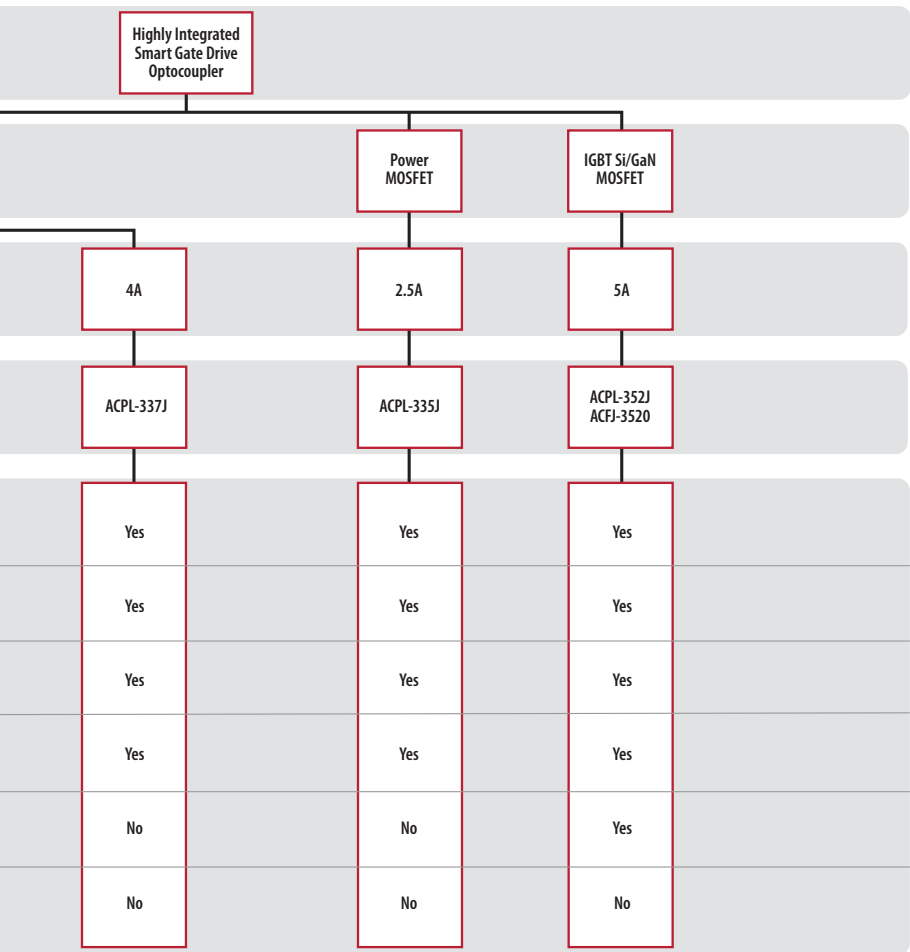




# Product Selection Trees

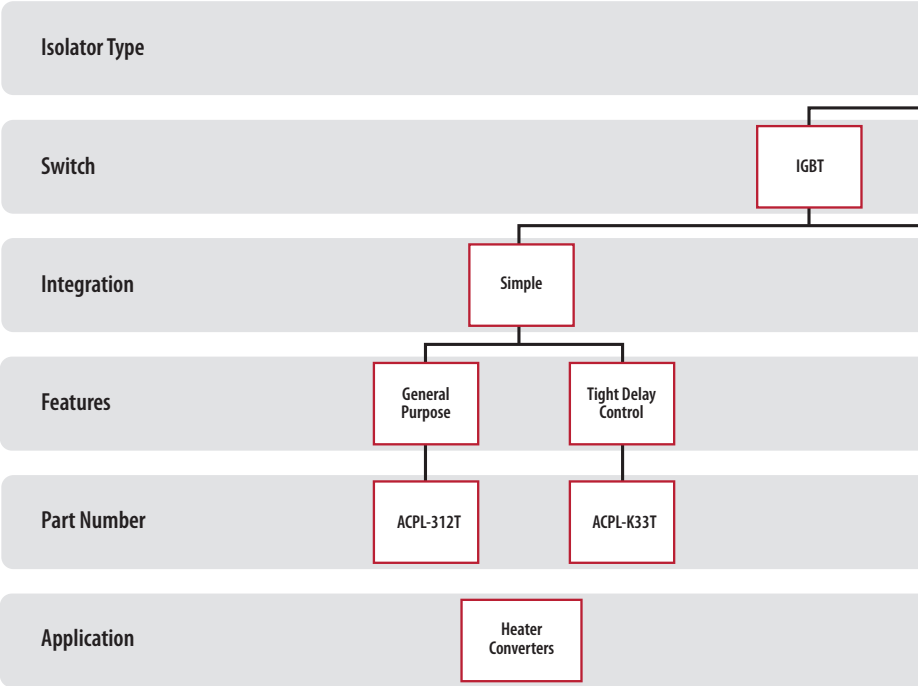
## Highly Integrated Smart Gate Drive Optocoupler NPI Product Tree

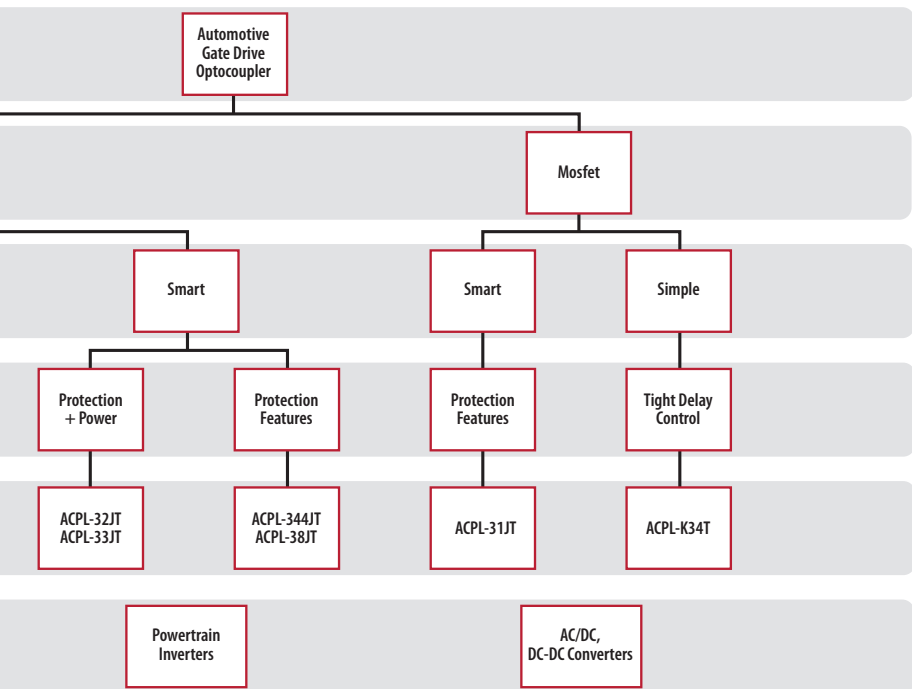




# Product Selection Trees


## Automotive Gate Drive Optocoupler NPI Product Tree





# Plastic Optocouplers

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

Part No.	Package	Channel	Forward Direction	Reverse Direction	I <sub>FOH</sub> mA Min.	t <sub>FLH</sub> ns Max.	t <sub>FRH</sub> ns Max.	PWD ns Max.	t <sub>FBK</sub> ns Max.	V <sub>CC</sub> V Min.	V <sub>CC</sub> V Max.	CMR - V/μs@V <sub>CH</sub>		V <sub>ISO</sub> V RMS Min.	V <sub>ORM</sub> V peak
												CMR V/μs (Min.)	V <sub>CH</sub> V		
ACSL-7210	SO8	2	1	1	-	40	40	8	20	3	5.5	25000	1000	3750	567*
ACSL-6210	SO8	2	1	1	7	100	100	35	40	3	5.5	10000	1000	2500	567*
ACSL-6400	SO16	4	4	0	7	100	100	35	40	3	5.5	10000	1000	2500	567*
ACSL-6410	SO16	4	3	1	7	100	100	35	40	3	5.5	10000	1000	2500	567*
ACSL-6420	SO16	4	2	2	7	100	100	35	40	3	5.5	10000	1000	2500	567*
ACSL-6310	SO16	3	2	1	7	100	100	35	40	3	5.5	10000	1000	2500	567*
ACSL-6300	SO16	3	3	0	7	100	100	35	40	3	5.5	10000	1000	2500	567*
ACFL-521IU 	SSO12	2	1	1	0.8	10000	10000	850	-	-	20	15000	1500	5000	1140*
ACFL-621IU 	SSO12	2	1	1	10	35	35	12	15	3.0	5.5	15000	1000	5000	1140*
ACFL-6212U 	SSO12	2	1	1	4	100	100	50	60	3.0	5.5	25000	1000	5000	1140*

Note: \* - with IEC/EN/DIN EN 60747-5-5 Option 060.

## High Speed Digital CMOS Optocoupler Product Selection

Part No.	Package	V <sub>DD</sub> V	I <sub>FOH</sub> mA Min.	Max Data Rate MBd Min.	t <sub>FLH</sub> ns Max.	t <sub>FRH</sub> ns Max.	PWD ns Max.	t <sub>FBK</sub> ns Max.	CMR - V/μs@V <sub>CH</sub>		V <sub>ISO</sub> V RMS Min.	V <sub>ORM</sub> V peak
									CMR V/μs (Min.)	V <sub>CH</sub> V		
ACPL-077L	SO8	3.3/5	-	25	40	40	6	20	35000	1000	3750	567*
ACPL-772L	300 mil DIP8	3.3/5	-	25	40	40	6	20	10000	1000	3750/5000#	630*
HCPL-0710	SO8	5	-	12.5	40	40	8	20	10000	1000	3750	567*
HCPL-0720	SO8	5	-	25	40	40	8	20	10000	1000	3750	567*
HCPL-0721	SO8	5	-	25	40	40	6	20	10000	1000	3750	567*
HCPL-0723	SO8	5	-	50	22	22	2	16	10000	1000	3750	567*
HCPL-7710	300 mil DIP8	5	-	12.5	40	40	8	20	10000	1000	3750/5000#	630*
HCPL-7720	300 mil DIP8	5	-	25	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-7723	300 mil DIP8	5	-	50	22	22	2	16	10000	1000	3750/5000#	630*
ACPL-M75L	SO5	3.3/5	4	15	55	55	25	40	10000	1000	3750	567*
ACPL-M71U	SO5	3.3/5	4	15	35	35	12	15	15000	1000	3750	567*
ACPL-071L	SO8	3.3/5	9	15	40	40	25	30	10000	1000	3750	567*
ACPL-W70L	Stretched SO6	3.3/5	4	15	55	55	25	40	10000	1000	5000	1140*
HCPL-0708	SO8	5	10	15	60	60	30	40	10000	1000	3750	567*
ACSL-7210	SO8	3.3/5	-	25	40	40	8	20	25000	1000	3750	567*
ACPL-074L	SO8	3.3/5	9	15	40	40	25	30	10000	1000	3750	567*
HCPL-0738	SO8	5	10	15	60	60	30	40	10000	1000	3750	567*
ACPL-K73L	Stretched SO8	3.3/5	4	15	55	55	25	40	10000	1000	5000	1140*

Note: \* - with IEC/EN/DIN EN 60747-5-5 Option 060, # - with UL5000V/1 minute Option 020.

## 20 MBd Logic Gate Optocoupler Product Selection

Part No.	Package	I <sub>FOH</sub> mA Min.	t <sub>FLH</sub> ns Max.	t <sub>FRH</sub> ns Max.	PWD ns Max.	t <sub>FBK</sub> ns Max.	CMR - V/μs@V <sub>CH</sub>		V <sub>ISO</sub> V RMS Min.	V <sub>ORM</sub> V peak
							CMR V/μs (Min.)	V <sub>CH</sub> V		
HCPL-2400	300 mil DIP8	4	60	60	25	35	1000	300	3750	630*
HCPL-2430	300 mil DIP8	4	60	60	25	35	1000	300	3750	630*

Note: \* - with IEC/EN/DIN EN 60747-5-5 Option 060.



## 10 Mbd Logic Gate Optocoupler Product Selection

Part No.	Package	VDD V	I <sub>FCM</sub> mA Min.	t <sub>PLH</sub> ns Max.	t <sub>PHL</sub> ns Max.	PWD ns Max.	t <sub>PROP</sub> ns Max.	CMR - V/μs@V <sub>CH</sub>		V <sub>ISO</sub> V <sub>RMS</sub> Min.	V <sub>ORM</sub> V peak
								CMR V/μs (Min.)	V <sub>CH</sub> V		
ACPL-W60L	Stretched SO6	3.3/5	5	90	75	25	40	15000	1000	5000	1140*
ACPL-P61I	Stretched SO6	5	5	100	100	35	40	10000	1000	5000	891*
ACPL-W61I	Stretched SO6	5	5	100	100	35	40	10000	1000	5000	1140*
6NI37	300 mil DIP8	5	5	100	100	35	40	1000	10	3750/5000#	630*
HCNW137	400 mil DIP8	5	5	100	100	40	40	5000	1000	5000	1414
HCNW260I	400 mil DIP8	5	5	100	100	40	40	10000	1000	5000	1414
HCNW260I	400 mil DIP8	5	5	100	100	40	40	15000	1000	5000	1414
HCPL-060L	SO8	3.3/5	5	90	75	25	40	15000	1000	3750	567*
HCPL-260L	300 mil DIP8	3.3/5	5	90	75	25	40	15000	1000	3750/5000#	630*
HCPL-061N	SO8	5	3	100	100	45	60	1000	1000	3750	567*
HCPL-0600	SO8	5	5	100	100	35	40	5000	1000	3750	567*
HCPL-0601	SO8	5	5	100	100	35	40	10000	1000	3750	567*
HCPL-061I	SO8	5	5	100	100	35	40	15000	1000	3750	567*
HCPL-260I	300 mil DIP8	5	5	100	100	35	40	10000	1000	3750/5000#	630*
HCPL-261I	300 mil DIP8	5	5	100	100	35	40	15000	1000	3750/5000#	630*
HCPL-261N	300 mil DIP8	5	3	100	100	45	60	1000	1000	3750/5000#	630*
ACPL-M60L	SOS	3.3/5	5	90	75	25	40	15000	1000	3750	567*
ACPL-M61U	SOS	5	5	100	100	35	40	15000	1000	3750	-
HCPL-M61I	SOS	5	5	100	100	35	40	10000	1000	3750	-
ACNV260I	500 mil DIPI0	5	5	100	100	40	40	20000	1500	7500	2262
ACNV260E	500 mil DIPI0	5	5	100	100	40	40	20000	1500	5000	ATEX (375V)
ACPL-K63L	Stretched SO8	3.3/5	5	90	75	25	40	15000	1000	5000	1140*
HCPL-063L	SO8	3.3/5	5	90	75	25	40	15000	1000	3750	567*
HCPL-063N	SO8	5	3	100	100	45	60	1000	1000	3750	567*
HCPL-0630	SO8	5	5	100	100	35	40	5000	1000	3750	567*
HCPL-0631	SO8	5	5	100	100	35	40	10000	1000	3750	567*
HCPL-0661	SO8	5	5	100	100	35	40	15000	1000	3750	567*
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	1000	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*

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

## 10 Mbd CMOS Optocoupler Product Selection

Part No.	Package	VDD V	I <sub>FCM</sub> mA Min.	t <sub>PLH</sub> ns Max.	t <sub>PHL</sub> ns Max.	PWD ns Max.	t <sub>PROP</sub> ns Max.	CMR - V/μs@V <sub>CH</sub>		V <sub>ISO</sub> V <sub>RMS</sub> Min.	V <sub>ORM</sub> V peak
								CMR V/μs (Min.)	V <sub>CH</sub> V		
ACPL-061L	SO8	3.3/5	1.6	80	80	30	30	20000	1000	3750	567*
ACPL-C61L	Stretched SO8	3.3/5	3.0	90	90	30	30	20000	1000	5000	1414*
ACNV261L	400 mil DIP8	3.3/5	4.0	95	95	40	30	20000	1000	5000	1414
ACNT-H61L	SO8	3.3/5	4.5	100	100	40	40	20000	1000	7500	2262
ACPL-W61L	Stretched SO6	3.3/5	1.6	80	80	30	30	20000	1000	5000	1140*
ACPL-M61L	SOS	3.3/5	1.6	80	80	30	30	20000	1000	3750	567*
ACPL-M72U	SOS	3.3/5	4.0	100	100	50	60	25000	1000	3750	567*
ACPL-M62L	SOS	3.3/5	2.0	80	80	30	30	20000	1000	3750	567*
ACPL-064L	SO8	3.3/5	1.6	80	80	30	30	20000	1000	3750	567*
ACPL-K64L	Stretched SO8	3.3/5	1.6	80	80	30	30	20000	1000	5000	1140*

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

## 8 MBd Logic Gate Optocoupler Product Selection

Part No.	Package	$I_{F(on)}$ mA Min.	$t_{PLH}$ $\mu$ s Max.	$t_{PHL}$ $\mu$ s Max.	CMR - V/ $\mu$ s@ $V_{CH}$		$V_{ISO}$ $V_{RMS}$ Min.	$V_{ORM}$ V peak
					CMR V/ $\mu$ s (Min.)	$V_{CH}$ V		
HCPL-0300	SO8	0.5	0.16	0.2	100	50	3750	-
HCPL-2300	300 mil DIP8	0.5	0.16	0.2	100	50	3750	630*

Note: \* - with IEC/EN/DIN EN 60747-5-5 Option 060.

## 5 MBd Logic Gate Optocoupler Product Selection

Part No.	Package	VCC V Max	$I_{F(on)}$ mA Min.	$t_{PLH}$ $\mu$ s Max.	$t_{PHL}$ $\mu$ s Max.	CMR - V/ $\mu$ s@ $V_{CH}$		$V_{ISO}$ $V_{RMS}$ Min.	$V_{ORM}$ V peak
						CMR V/ $\mu$ s (Min.)	$V_{CH}$ V		
HCNW2201	400 mil DIP8	20	1.6	0.3	0.3	1000	50	5000	1414
HCNW2211	400 mil DIP8	20	1.6	0.3	0.3	10000	1000	5000	1414
HCPL-0201	SO8	20	1.6	0.3	0.3	1000	50	3750	567*
HCPL-0211	SO8	20	1.6	0.3	0.3	10000	1000	3750	567*
HCPL-2201	300 mil DIP8	20	1.6	0.3	0.3	1000	50	3750	630*
HCPL-2211	300 mil DIP8	20	1.6	0.3	0.3	10000	1000	3750	630*
HCPL-2219	300 mil DIP8	20	1.6	0.3	0.3	2500	400	3750	630*
HCPL-2200	300 mil DIP8	20	1.6	0.3	0.3	1000	50	3750	630*
HCPL-2202	300 mil DIP8	20	1.6	0.3	0.3	1000	50	3750	630*
HCPL-2212	300 mil DIP8	20	1.6	0.3	0.3	10000	1000	3750	630*
HCPL-2231	300 mil DIP8	20	1.8	0.3	0.3	1000	50	3750	-
HCPL-2232	300 mil DIP8	20	1.8	0.3	0.3	10000	1000	3750	-

Note: \* - with IEC/EN/DIN EN 60747-5-5 Option 060.

## 5 MBd CMOS Optocoupler Product Selection

Part No.	Package	VCC V Max	$I_{F(on)}$ mA Min.	$t_{PLH}$ $\mu$ s Max.	$t_{PHL}$ $\mu$ s Max.	CMR - V/ $\mu$ s@ $V_{CH}$		$V_{ISO}$ $V_{RMS}$ Min.	$V_{ORM}$ V peak
						CMR V/ $\mu$ s (Min.)	$V_{CH}$ V		
ACPL-M21L	SO5	2.5/3.3/5	1.6	0.25	0.25	25000	1000	3750	567*
ACPL-W21L	Stretched SO6	2.5/3.3/5	1.6	0.25	0.25	25000	1000	5000	1140*
ACPL-024L	SO8	2.5/3.3/5	1.6	0.25	0.25	25000	1000	3750	567*
ACPL-K24L	Stretched SO8	2.5/3.3/5	1.6	0.25	0.25	25000	1000	5000	1140*
ACPL-021L	SO8	2.5/3.3/5	1.6	0.25	0.25	25000	1000	3750	567*

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

## 1 Mbd Transistor Output Optocoupler Product Selection

Part No.	Package	V <sub>DD</sub> V	Max V <sub>DD</sub> V	I <sub>F(ON)</sub> mA Min.	CTR			t <sub>PLH</sub> μs Max.	t <sub>PHL</sub> μs Max.	CMR - V/μs@V <sub>CH</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>CH</sub> V		
ACPL-M50L	SO5	3.3/5	24	3	80	200	3	1.0	1.0	15000	1000	3750	567*
ACPL-M51L (4-pin configurable)	SO5	2.5/3.3/5	24	3	60	200	3	1.0	1.0	15000	1000	3750	567*
ACPL-W50L	Stretched SO6	3.3/5	24	3	53	200	3	1.0	1.0	15000	1000	5000	1140*
6NI35	300 mil DIP8	5	15	16	7	50	16	2.0	2.0	1000	10	3750/5000#	630*
6NI36	300 mil DIP8	5	15	16	19	50	16	1.0	1.0	1000	10	3750/5000#	630*
HCNW135	400 mil DIP8	5	15	16	5	-	16	2.0	2.0	1000	10	5000	1414
HCNW136	400 mil DIP8	5	15	16	19	50	16	1.0	1.0	1000	10	5000	1414
HCPL-050L	SO8	3.3/5	15	16	15	50	16	1.0	1.0	1000	10	3750	567*
HCPL-0500	SO8	5	15	16	7	50	16	2.0	2.0	1000	10	3750	567*
HCPL-0501	SO8	5	15	16	19	50	16	1.0	1.0	1000	10	3750	567*
HCPL-250L	300 mil DIP8	3.3/5	15	16	15	50	16	1.0	1.0	1000	10	3750/5000#	630*
HCPL-2502	300 mil DIP8	5	15	16	15	22	16	0.8	0.8	-	-	3750/5000#	-
HCPL-2503	300 mil DIP8	5	15	8	15	-	8	2.5	1.5	-	-	3750/5000#	-
ACNT-H50L	Stretched SO8	1	24	10	31	80	12	1.3	1	15000	1500	7500	2262
ACPL-054L	SO8	3.3/5	24	3	53	200	3	1.0	1.0	15000	1000	3750	567*
ACPL-K54L	Stretched SO8	3.3/5	24	3	53	200	3	1.0	1.0	15000	1000	5000	1140*
HCPL-053L	SO8	3.3/5	15	16	15	50	16	1.0	1.0	1000	10	3750	567*
HCPL-0530	SO8	5	15	16	7	50	16	2.0	2.0	1000	10	3750	-
HCPL-0531	SO8	5	15	16	19	50	16	1.0	1.0	1000	10	3750	-
HCPL-253L	300 mil DIP8	3.3/5	15	16	15	50	16	1.0	1.0	1000	10	3750/5000#	630*
HCPL-2530	300 mil DIP8	5	15	16	7	50	16	2.0	2.0	1000	10	3750/5000#	-
HCPL-2531	300 mil DIP8	5	15	16	19	50	16	1.0	1.0	1000	10	3750/5000#	-
HCPL-2533	300 mil DIP8	5	15	8	15	-	8	2.5	1.5	-	-	3750	-

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

## 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>PHL</sub> μs Max.	CMR - V/μs@V <sub>CH</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>CH</sub> V		
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
6NI38	300 mil DIP8	5	0.5	300	2600	1.6	50	15	1000	10	3750/5000#	-
6NI39	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-070A	SO8	5	0.04	800	25000	0.04	25	60	1000	10	3750	567*
HCPL-070L	SO8	3.3/5	0.5	400	5000	0.5	90	30	1000	10	3750	567*
HCPL-0700	SO8	5	0.5	300	2600	1.6	50	15	1000	10	3750	567*
HCPL-0701	SO8	5	0.5	400	5000	0.5	10	2	1000	10	3750	567*
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	SO5	5	0.5	300	2600	1.6	35	20	1000	10	3750	-
HCPL-M701	SO5	5	0.5	400	3500	0.5	10	2	1000	10	3750	-
HCPL-073A	SO8	5	0.04	800	25000	0.04	130	25	1000	10	3750	-
HCPL-073L	SO8	3.3/5	0.5	400	5000	0.5	90	30	1000	10	3750	567*
HCPL-0730	SO8	5	0.5	400	5000	0.5	35	20	1000	10	3750	-
HCPL-0731	SO8	5	0.5	400	5000	0.5	35	20	1000	10	3750	-
HCPL-273L	300 mil DIP8	3.3/5	0.5	400	5000	0.5	90	30	1000	10	3750/5000#	630*
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-4731	300 mil DIP8	5	0.04	800	25000	0.04	90	25	1000	10	3750/5000#	-

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

## Automotive 10MBd Logic Gate Optocoupler

Part No.	Package	V <sub>ISO</sub> V <sub>RMS</sub>	V <sub>IORM</sub> V peak	Operating Temperature °C	V <sub>CC</sub> V	I <sub>LED</sub> mA	I <sub>SD</sub> mA	t <sub>PLH</sub> Max. ns	t <sub>PHL</sub> Max. ns	PWD Max.	t <sub>PSK</sub> Max.	CMR dV/dt kV/μs	V <sub>CH</sub> V
ACPL-M71T	SO5	4000	560	-40 to 125	3.0 to 5.5	4 to 15	1.5	35	35	12	15	15	1000
ACPL-K71T	SS08	5000	1140	-40 to 125	3.0 to 5.5	4 to 15	1.5	35	35	12	15	15	1000
ACPL-M72T	SO5	4000	560	-40 to 125	3.0 to 5.5	4 to 15	1.5	100	100	50	60	25	1000
ACPL-K72T	SS08	5000	1140	-40 to 125	3.0 to 5.5	4 to 15	1.5	100	100	50	60	25	1000
ACPL-K74T	SS08	5000	1140	-40 to 125	3.0 to 5.5	4 to 15	1.5	35	35	12	15	15	1000
ACPL-K75T	SS08	5000	1140	-40 to 125	3.0 to 5.5	4 to 15	1.5	100	100	50	60	25	1000
ACFL-6211T	NEW SSO12	5000	1140	-40 to 125	3.0 to 5.5	4 to 15	1.5	35	35	12	15	15	1000
ACFL-6212T	NEW SSO12	5000	1140	-40 to 125	3.0 to 5.5	4 to 15	1.5	100	100	50	60	25	1000
ACPL-M61T	SO5	4000	560	-40 to 125	4.5 to 5.5	5 to 15	13	100	100	35	40	15	1000

## Automotive ≤1MBd Transistor Output Optocoupler

Part No.	Package	V <sub>ISO</sub> V <sub>RMS</sub>	V <sub>IORM</sub> V peak	Operating Temperature °C	V <sub>CC</sub> V	I <sub>LED</sub> mA	CTR Min. %	CTR Typ. %	t <sub>PLH</sub> Max. μs	t <sub>PHL</sub> Max. μs	PWD Max. μs	t <sub>PSK</sub> Max. μs	CMR dV/dt kV/μs	CMR V <sub>CH</sub> V
ACPL-M46T	SO5	4000	560	-40 to 125	4.5 to 30	10 to 20	44	90	0.55	0.55	0.45	0.45	15	1500
ACPL-M43T	SO5	4000	560	-40 to 125	3.0 to 20	0.8 to 15	20	45	1	1	0.45	0.5	15	1500
ACPL-K43T	SS08	5000	1140	-40 to 125	3.0 to 20	0.8 to 15	24	65	1	1	0.45	0.5	15	1500
ACPL-M49T	SO6	4000	560	-40 to 125	3.0 to 20	4 to 10	50	110	20	20	-	-	15	1500
ACPL-K49T	SS08	5000	1140	-40 to 125	3.0 to 20	4 to 10	50	110	20	20	-	-	15	1500
ACPL-K44T	SS08	5000	1140	-40 to 125	3.0 to 20	0.8 to 15	20	65	1	1	0.45	0.5	15	1500
ACFL-5211T	NEW SSO12	5000	1140	-40 to 125	3.0 to 20	0.8 to 15	20	65	1	1	0.45	0.5	15	1500
ACFL-5212T	NEW SSO12	5000	1140	-40 to 125	3.0 to 20	4 to 10	50	110	20	20	-	-	15	1500

## Automotive Analog Optocoupler

Part No.	Package	V <sub>ISO</sub> V <sub>RMS</sub>	V <sub>IORM</sub> V peak	Operating Temperature °C	V <sub>CC</sub> V	I <sub>LED</sub> mA	CTR (Sat) Min. %	(TA = 25 °C)		BW Typ. kHz	CMR dV/dt kV/μs	CMR V <sub>CH</sub> V
								CTR Min. %	CTR Max. %			
ACPL-M43T	SO5	4000	560	-40 to 125	3.0 to 20	0.8 to 15	20	32	100	1000	15	1500
ACPL-K43T	SS08	5000	1140	-40 to 125	3.0 to 20	0.8 to 15	24	32	100	1000	15	1500
ACPL-M49T	SO5	4000	560	-40 to 125	3.0 to 20	4 to 10	20	70	175	-	15	1500
ACPL-K49T	SS08	5000	1140	-40 to 125	3.0 to 20	4 to 10	24	70	175	-	15	1500
ACFL-5211T	SSO12	5000	1140	-40 to 125	3.0 to 20	0.8 to 15	24	32	100	1000	15	1500
ACFL-5212T	SSO12	5000	1140	-40 to 125	3.0 to 20	4 to 10	35	70	175	-	15	1500

## Automotive Gate Drive Optocoupler

Part No.	Features	Package	V <sub>ISO</sub> V <sub>RMS</sub>	V <sub>ORM</sub> V peak	Operating Temperature °C	V <sub>CC</sub> V	I <sub>LED</sub> Typ. mA	I <sub>o</sub> peak Max. A	I <sub>CC</sub> Max. mA	t <sub>PLH</sub> Max. ns	t <sub>RHL</sub> Max. ns	PWD Max. ns	t <sub>PSK</sub> Max. ns	CMR dV/dt kV/μs	CMR V <sub>CH</sub> V
ACPL-38JT	Desat, UVLO, Fault Feedback	SO16	5000	1230	-40 to 125	15 to 30	Buffered	2.5	5	500	500	300	350	15	1500
ACPL-344JT	Desat and UVLO with separate Fault Feedback, Rail-to-Rail, Miller Clamp/Soft Shutdown	SO16	5000	1230	-40 to 125	15 to 25	10 to 16	2.5	13.6	250	250	-100 to 100	-150 to 105	30	1500
ACPL-31JT <b>NEW</b>		SO16	5000	1230	-40 to 125	12 to 20	10 to 16	2.5	5	250	250	-15 to 100	-100 to 15	50	1500
ACPL-32JT	DC-DC Flyback Controller, Desat and UVLO with separate Fault Feedback, Rail-to-Rail, Miller Clamp/Soft Shutdown	SO16	5000	1230	-40 to 125	19 to 21.5	10 to 16	2.5	13.6	250	250	-40 to 140	-160 to 60	30	1500
ACPL-33JT		SO16	5000	1230	-40 to 125	15.2 to 16.8	10 to 16	2.5	14.2	250	250	-150 to 150	-150 to 150	50	1500
ACPL-K34T	200kHz, tight dead time control	SS08	5000	1140	-40 to 125	10 to 20	10 to 13	2.5	3.9	110	110	40	-40 to 50	50	1500
ACPL-K33T	200kHz, tight dead time control	SS08	5000	1140	-40 to 125	15 to 30	10 to 13	2.5	4.2	120	120	40	-40 to 50	50	1500
ACPL-312T	UVLO	DIP8	3750	630	-40 to 125	15 to 30	7 to 16	2.5	5	500	500	300	350	15	1500
ACPL-K30T <b>NEW</b>	Photovoltaic Driver	SS08	5000	1140	-40 to 125	4.5	10 to 20	4μA	-	-	-	-	-	-	-

Note: \* - Advanced information, may subject to changes.

## Automotive Miniature Isolation Amplifier

Part No.	Features	Package	V <sub>ISO</sub> V <sub>RMS</sub>	V <sub>ORM</sub> V peak	Operating Temperature °C	V <sub>DD</sub> V	Input Range Typ. V	Gain Typ. V/V	Gain Tol Max. %	NonL Max. %	Off-set Max. mV	BW Typ. kHz	CMR dV/dt kV/μs	CMR V <sub>CH</sub> V
ACPL-782T	2% Gain Tolerance, Differential Output	DIP8	4000	891	-40 to 125	4.5 to 5.5	±0.2	8	2	0.35	±4	100	10	1000
ACPL-C87AT	DC Voltage Sensing, Shut-down Control, Differential Output	SS08	5000	1414	-40 to 125	4.5 to 5.5	0 to 2	1	1	0.12	±10	100	10	1000
ACPL-C87BT		SS08	5000	1414	-40 to 125	4.5 to 5.5	0 to 2	1	0.5	0.12	±10	100	10	1000
ACPL-C797T <b>NEW</b>	Sigma-Delta Output, 16-bit resolution, 12-bit ENOB typ.	SS08	5000	1414	-40 to 125	4.5 to 5.5	±0.2	NA	1	0.05	-0.3 to 1.7	NA	25	1000

## Extended Temperature R<sup>2</sup>Coupler

Part No.	Package	Operating Temperature °C	I <sub>OUT</sub> A (MAX)	I <sub>F</sub> mA	CTR		t <sub>PLH</sub> μs Max.	t <sub>RHL</sub> μs Max.	PWD ns Max.	t <sub>PSK</sub> ns Max.	CMR - V/μs@V <sub>CH</sub>		V <sub>ISO</sub> V <sub>RMS</sub> Min.	V <sub>ORM</sub> V peak
					% Min.	% Max.					CMR V/μs (Min.)	V <sub>CH</sub> V		
ACFL-521IU <b>NEW</b>	SS012	-40 to 125	NA	0.8	32	100	1	1	850	NA	15000	15000	5000	1140*
ACFL-621IU <b>NEW</b>	SS012	-40 to 125	NA	4	NA	NA	0.35	0.35	12	15	15000	1000	5000	1140*
ACFL-6212U <b>NEW</b>	SS012	-40 to 125	NA	4	NA	NA	0.1	0.1	50	60	15000	1000	5000	1140*
ACPL-M71U	SO5	-40 to 125	NA	4	NA	NA	0.035	0.035	12	15	25000	1000	3750	567*
ACPL-M72U	SO5	-40 to 125	NA	4	NA	NA	0.1	0.1	50	60	25000	1000	3720	567*
ACPL-M43U	SO5	-40 to 125	NA	10	32	80	1.0	1.0	850	NA	15000	1500	3750	567*
ACPL-M46U	SO5	-40 to 125	NA	10	44	90	0.4	0.6	450.0	NA	15000	1500	3750	567*
ACPL-M61U	SO5	-40 to 125	NA	5	NA	NA	0.1	0.1	35	40	15000	1000	3750	567*
ACPL-M49U	SO5	-40 to 125	NA	10	32	80	20	20	NA	NA	15000	1500	3750	567*
ACPL-K49U	Stretched SO5	-40 to 125	NA	10	32	100	20	20	NA	NA	15000	1500	5000	1140 *
ACPL-312U	DIP6	-40 to 125	2.5	7	N/A	N/A	0.5	0.5	300	350 (P <sub>DD</sub> )	25000	1500	3750	630

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

## Digital Isolators

Part No.	Channel	Package	Max. Data Rate Mbd Min.	$t_{PLH}$ & $t_{PHL}$ ns Max.	$t_{PLH}$ & $t_{PHL}$ ns Max. ( $V_{CC}=3.3V$ )	PWD ns Max.	$t_{PSK}$ ns Max.	CMR - $V/\mu s @ V_{CH}$		$V_{ISO}$ $V_{RMS}$ Min.
								CMR $V/\mu s$ (Min.)	$V_{CH}$ V	
HCPL-0900	Single	SO8	100	15	18	3	6	15000	1000	2500
HCPL-9000	Single	300 mil DIP8	100	15	18	3	6	15000	1000	2500
HCPL-0930	Dual	SO8	100	15	18	3	6	15000	1000	2500
HCPL-9030	Dual	300 mil DIP8	100	15	18	3	6	15000	1000	2500
HCPL-0931	Dual, Bi-Dir	SO8	100	15	18	3	6	15000	1000	2500
HCPL-9031	Dual, Bi-Dir	300 mil DIP8	100	15	18	3	6	15000	1000	2500
ACML-7400	Quad	SO16 Wide Body	100	32	36	2	5	25000	1000	5600
HCPL-090J	Quad	SO16 Narrow Body	100	15	18	3	6	15000	1000	2500
HCPL-900J	Quad	SO16 Wide Body	100	15	18	3	6	15000	1000	2500
ACML-7420	Quad, 2/2, Bi-dir	SO16 Wide Body	100	32	36	2	5	25000	1000	5600
HCPL-091J	Quad, 2/2 Bi-dir	SO16 Narrow Body	100	15	18	3	6	15000	1000	2500
HCPL-901J	Quad, 2/2 Bi-dir	SO16 Wide Body	100	15	18	3	6	15000	1000	2500
ACML-7410	Quad, 3/1, Bi-dir	SO16 Wide Body	100	32	36	2	5	25000	1000	5600
ACCL-9410	<b>NEW</b> Quad, 3/1 Bi-dir	SO16 Narrow Body	25	40	40	8	15	-	-	1500
HCPL-092J	Quad, 3/1 Bi-dir	SO16 Narrow Body	100	15	18	3	6	15000	1000	2500
HCPL-902J	Quad, 3/1 Bi-dir	SO16 Wide Body	100	15	18	3	6	15000	1000	2500

## Miniature Isolation Amplifier

Part No.	Features	Package	Operating Temperature °C	Gain Error at 25°C % Typ.	Non-linearity % Typ.	Bandwidth kHz Typ.	$V_{D02}$ V	CMR - $V/\mu s @ V_{CH}$		$V_{ISO}$ $V_{RMS}$ Min.	$V_{DORM}$ V peak
								CMR $V/\mu s$ (Typ.)	$V_{CH}$ V		
ACNT-H79A	±200mV Inputs, Differential Outputs	14.2mm Stretched SO8	40 to +105	±1	0.05	200	3 - 5.5	15000	1000	7500	2262
ACNT-H790	±200mV Inputs, Differential Outputs	14.2mm Stretched SO8	40 to +105	±3	0.05	200	3 - 5.5	15000	1000	7500	2262
ACPL-C78A	±200mV Inputs, Differential Outputs	SSO8	-40 to +85	±1	0.0037	100	4.5 - 5.5	15000	1000	5000	1414
ACPL-C780	±200mV Inputs, Differential Outputs	SSO8	-40 to +85	±3	0.0037	100	4.5 - 5.5	15000	1000	5000	1414
ACPL-C784	±200mV Inputs, Differential Outputs	SSO8	-40 to +85	±5	0.0037	100	4.5 - 5.5	15000	1000	5000	1414
ACPL-C79B	±200mV Inputs, Differential Outputs	SSO8	-40 to +105	±0.5	0.05	200	3 - 5.5	15000	1000	5000	1414
ACPL-C79A	±200mV Inputs, Differential Outputs	SSO8	-40 to +105	±1	0.05	200	3 - 5.5	15000	1000	5000	1414
ACPL-C790	±200mV Inputs, Differential Outputs	SSO8	-40 to +105	±3	0.05	200	3 - 5.5	15000	1000	5000	1414
ACPL-790B	±200mV Inputs, Differential Outputs	DIP8	-40 to +105	±0.5	0.05	200	3 - 5.5	15000	1000	5000	891
ACPL-790A	±200mV Inputs, Differential Outputs	DIP8	-40 to +105	±1	0.05	200	3 - 5.5	15000	1000	5000	891
ACPL-7900	±200mV Inputs, Differential Outputs	DIP8	-40 to +105	±3	0.05	200	3 - 5.5	15000	1000	5000	891
HCPL-7800A	±200mV Inputs, Differential Outputs	DIP8	-40 to +85	±1	0.0037	100	4.5 - 5.5	15000	1000	3750	891
HCPL-7800	±200mV Inputs, Differential Outputs	DIP8	-40 to +85	±3	0.0037	100	4.5 - 5.5	15000	1000	3750	891
HCPL-7840	±200mV Inputs, Differential Outputs	DIP8	-40 to +85	±5	0.0037	100	4.5 - 5.5	15000	1000	3750	891*
HCPL-788J	±200mV Inputs, Onboard Fault Detection	SO16	-40 to +85	±3	0.06	30	4.5 - 5.5	25000	1000	5000	1414
ACPL-785J	±200mV Inputs, Onboard Fault Detection	SO16	-40 to +85	±5	0.06	30	4.5 - 5.5	25000	1000	5000	1414*
HCPL-7510	±200mV Inputs, Single-ended Outputs	DIP8	-40 to +85	±3	0.06	100	4.5 - 5.5	15000	1000	3750	891*
HCPL-7520	±200mV Inputs, Single-ended Outputs	DIP8	-40 to +85	±5	0.06	100	4.5 - 5.5	15000	1000	3750	891*
ACPL-C870	0-2V High Impedance Inputs, Differential Outputs	SSO8	-40 to +105	±3	0.04	100	3.3	15000	1000	5000	1414
ACPL-C87A	0-2V High Impedance Inputs, Differential Outputs	SSO8	-40 to +105	±1	0.04	100	3.3	15000	1000	5000	1414
ACPL-C87B	0-2V High Impedance Inputs, Differential Outputs	SSO8	-40 to +105	±0.5	0.04	100	3.3	15000	1000	5000	1414

Note: \* - with IEC/EN/DIN EN 60747-5-5 Option 060, \* - Advanced Information.

## Optically Isolated Sigma-Delta Modulator

Part No.	Features	Package	Operating Temperature °C	Gain Error at 25°C % Typ.	INL LSB Typ.	ENOB Bits Typ.	V <sub>DD2</sub> V	CMR - V/ μs@V <sub>CH</sub>		V <sub>ISO</sub> V <sub>RMS</sub> Min.	V <sub>IORM</sub> V peak
								CMR V/μs (Typ.)	V <sub>CH</sub> V		
ACPL-796J	External Clocked, 5 - 20MHz	SO16	-40 to +105	±1	3	12	3 - 5.5	25000	1000	5000	1414*
ACPL-798J	External Clocked, 5 - 25MHz	SO16	-40 to +105	±1	3	12	3.3 - 5.5	25000	1000	5000	1414
HCPL-786J	Internally Clocked, 10MHz	SO16	-40 to +85	±2	3	11	4.5 - 5.5	20000	1000	5000	1414
ACPL-C797	Internally Clocked, 10MHz	SS08	-40 to +105	±1	3	12	3 - 5.5	25000	1000	5000	1414
ACPL-C799*	±50mV Input Range, Internally Clocked, 10MHz	SS08	-40 to +105	±1	11	12	3 - 5.5	25000	1000	5000	1414
ACPL-7970	Internally Clocked, 10MHz	DIP8	-40 to +105	±1	3	12	3 - 5.5	25000	1000	5000	891
HCPL-7860	Internally Clocked, 10MHz	DIP8	-40 to +85	±1 (Matching)	3	11	4.5 - 5.5	20000	1000	3750	891
HCPL-7560	Internally Clocked, 10MHz	DIP8	-40 to +85	±5	64	8	4.5 - 5.5	20000	1000	3750	891*

Note: \* - with IEC/EN/DIN EN 60747-5-5 Option 060, - VDD, \* - Advanced Information.

## Highly Integrated Smart Gate Drive Optocoupler

Part No.	Package	I <sub>F(ON)</sub> mA Min.	I <sub>OUT</sub> A Min.	I <sub>OUT</sub> A Max.	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>CH</sub>		V <sub>ISO</sub> V <sub>RMS</sub> Min.	V <sub>IORM</sub> V peak
									CMR V/μs (Min.)	V <sub>CH</sub> V		
ACPL-352J	NEW SO16	6	4.5	5.0	0.15	0.15	0.075	30	50000	2000	5000	1414
ACPL-3520	SO20	<ul style="list-style-type: none"> <li>- 5A gate drive optocoupler for IGBT and SiC/GaN MOSFET</li> <li>- Up to 10mm creepage and clearance</li> <li>- Low Propagation Delay (&lt;150ns)</li> <li>- Over current, UVLO, GATE status detection with isolated feedback</li> </ul>										
ACPL-302J	SO16	10	-	2.5	0.25	0.25	0.16	25	30000	1500	5000	1230
		<ul style="list-style-type: none"> <li>- Integrated DC-DC Controller for floating power supply</li> <li>- Integrated short circuit protection and fault feedback</li> <li>- Under Voltage Lockout(UVLO) protection with feedback</li> <li>- Integrated Active Miller Clamp</li> </ul>										
ACPL-339J	SO16	6	1.0	-	0.30	0.30	0.2	30	25000	1500	5000	1414
		<ul style="list-style-type: none"> <li>- Scalable &amp; Efficient gate drive design</li> <li>- Dual Rail-to-Rail output to drive external MOSFET buffer</li> <li>- Active timing control to prevent cross conduction in MOSFET buffer</li> <li>- Integrated short circuit protection and fault feedback</li> </ul>										
ACPL-337J	SO16	9	3.0	4.0	0.22	0.25	0.15	30	30000	1500	5000	1414
ACPL-336J	SO16	9	2.0	2.5	0.22	0.25	0.15	30	30000	1500	5000	1414
		<ul style="list-style-type: none"> <li>- Rail-to-rail output voltage</li> <li>- Integrated short circuit protection and fault feedback</li> <li>- Under Voltage Lockout(UVLO) protection with feedback</li> <li>- Integrated Active Miller Clamp and LED driver</li> </ul>										
ACPL-335J	NEW SO16	10	2.5	2.0	0.25	0.25	0.10	20	50000	1500	5000	1230
		<ul style="list-style-type: none"> <li>- 2.5A MOSFET gate drive optocoupler</li> <li>- UVLO threshold for MOSFET protection</li> <li>- Over current threshold for MOSFET protection</li> <li>- Hard shut down for fast MOSFET protection</li> </ul>										
ACPL-333J ACPL-332J	SO16	8	2.0	2.5	0.25	0.25	0.15	30	50000	1500	5000	1414
		<ul style="list-style-type: none"> <li>- 2.5A Highly Integrated Gate Drive Optocoupler with Active Miller Clamp, Over-Current Protection and Fault Feedback</li> <li>- Under Voltage Lock-Out Protection (UVLO) with Hysteresis</li> <li>- Automatic Fault Reset after fixed delay time (for ACPL-333J-000E only)</li> </ul>										
ACPL-331J ACPL-330J	SO16	8	1.0	1.5	0.25	0.25	0.15	30	50000	1500	5000	1414
		<ul style="list-style-type: none"> <li>- 1.5A Highly Integrated Gate Drive Optocoupler with Active Miller Clamp, Over-Current Protection and Fault Feedback</li> <li>- Under Voltage Lock-Out Protection (UVLO) with Hysteresis</li> <li>- Automatic Fault Reset after fixed delay time (for ACPL-330J-000E only).</li> </ul>										
HCPL-316J	SO16	-	2.0	2.5	0.5	0.5	0.3	30	15000	1500	5000	1414
		<ul style="list-style-type: none"> <li>- 2.0 A Highly Integrated Gate Drive Optocoupler with over-current Protection and Fault Feedback</li> <li>- CMOS compatible</li> <li>- Under Voltage Lock-Out Protection (UVLO) with Hysteresis</li> </ul>										

## Basic Gate Drive Optocoupler

Part No.	Package	I <sub>F(on)</sub> mA Min.	I <sub>out</sub> A Min.	I <sub>out</sub> A Max.	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>ISO</sub> V <sub>RMS</sub> Min.	V <sub>IOEM</sub> V peak
									CMR V/μs (Min.)	V <sub>CM</sub> V		
ACNT-H313	<b>NEW</b> 14.2mm Stretched SO8	7	2.0	2.5	0.5	0.5	0.35	30	40000	2000	7500	2262
ACNV3130	500 mil DIP	12	2.0	2.5	0.50	0.50	0.35	30	40000	1500	7500	2262
ACNW3430	<b>NEW</b> 400 mil DIP	8	4.0	5.0	0.18	0.18	0.09	30	100000	1500	5000	1414
ACNW3410	<b>NEW</b> 400 mil DIP	8	2.5	3.0	0.18	0.18	0.09	30	100000	15 00	5000	1414
ACPL-P349	<b>NEW</b> Stretched SO6	7	2.0	2.5	0.11	0.11	0.05	30	50000	1500	3750	891*
ACPL-W349	<b>NEW</b> Stretched SO6	7	2.0	2.5	0.11	0.11	0.05	30	50000	1500	5000	1140*
ACPL-P346	Stretched SO6	7	2.0	2.5	0.12	0.12	0.05	20	50000	1500	3750	891*
ACPL-W346	Stretched SO6	7	2.0	2.5	0.12	0.12	0.05	20	50000	1500	5000	1140*
ACPL-P347	<b>NEW</b> Stretched SO6	7	0.8	1.0	0.11	0.11	0.05	30	50000	1500	3750	891*
ACPL-W347	<b>NEW</b> Stretched SO6	7	0.8	1.0	0.11	0.11	0.05	30	50000	1500	5000	1140
ACPL-P345	Stretched SO6	7	0.8	1.0	0.12	0.12	0.05	20	50000	1500	3750	891*
ACPL-W345	Stretched SO6	7	0.8	1.0	0.12	0.12	0.05	20	50000	1500	5000	1140*
ACPL-P343	Stretched SO6	7	3.0	4.0	0.20	0.20	0.1	30	35000	1500	3750	891*
ACPL-W343	Stretched SO6	7	3.0	4.0	0.20	0.20	0.1	30	35000	1500	5000	1140*
ACPL-P341	Stretched SO6	7	2.5	3.0	0.20	0.20	0.1	30	35000	1500	3750	891*
ACPL-W341	Stretched SO6	7	2.5	3.0	0.20	0.20	0.1	30	35000	1500	5000	1140*
ACPL-P340	Stretched SO6	7	0.8	1.0	0.20	0.20	0.1	30	35000	1500	3750	891*
ACPL-W340	Stretched SO6	7	0.8	1.0	0.20	0.20	0.1	30	35000	1500	5000	1140*
ACPL-H342	Stretched SO8	7	2.0	2.5	0.35	0.25	-0.2	30	40000	1500	3750	891*
ACPL-K342	Stretched SO8	7	2.0	2.5	0.35	0.25	-0.2	30	40000	1500	5000	1140*
ACPL-312U	300 MIL DIP	7	2.0	2.5	0.5	0.5	0.35	30	25000	1500	3750	630
ACPL-H312	Stretched SO8	7	2.0	2.5	0.5	0.5	0.35	30	15000	1500	3750	891*
ACPL-K312	Stretched SO8	7	2.0	2.5	0.5	0.5	0.35	30	15000	1500	5000	1140*
ACPL-P302	Stretched SO6	7	0.2	0.4	0.7	0.7	0.5	30	10000	1000	3750	891*
ACPL-P314	Stretched SO6	8	0.4	0.6	0.7	0.7	0.5	30	25000	1000	3750	891*
ACPL-W302	Stretched SO6	7	0.2	0.4	0.7	0.7	0.5	30	10000	1000	5000	1140*
ACPL-W314	Stretched SO6	8	0.4	0.6	0.7	0.7	0.5	30	25000	1000	5000	1140*
ACNW3190	400 mil DIP8	10	4.0	5.0	0.5	0.5	0.3	30	15000	1500	5000	1414
ACNW3130	400 mil DIP8	10	2.0	2.5	0.5	0.5	0.35	30	40000	1500	5000	1414
ACPL-3130	300 mil DIP8	7	2.0	2.5	0.5	0.5	0.35	30	40000	1500	3750	630*
ACPL-J313	300 mil DIP8	7	2.0	2.5	0.5	0.5	0.35	30	40000	1500	3750	1230
ACPL-T350	300 mil DIP8	7	2.0	2.5	0.5	0.5	0.35	30	15000	1500	3750	630*
HCNW3120	400 mil DIP8	10	2.0	2.5	0.5	0.5	0.3	30	25000	1500	5000	1414
HCPL-J312	300 mil DIP8	7	2.0	2.5	0.5	0.5	0.35	30	25000	1500	3750	1230
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	-
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-3180	300 mil DIP8	10	2.0	2.5	0.2	0.2	0.09	20	10000	1500	3750	630*
HCPL-314J	SO16	8	0.4	0.6	0.7	0.7	0.5	30	25000	1500	5000	1414
HCPL-315J	SO16	7	0.5	0.6	0.5	0.5	0.35	30	15000	1500	5000	1414

Note: \* - with IEC/EN/DIN EN 60747-5-5 Option 060.



## Intelligent Power Module Interface Optocoupler Product Selection

Part No.	Package	I <sub>F(on)</sub> mA Min.	CTR			t <sub>FLH</sub> μs Max.	t <sub>RHL</sub> μs Max.	P <sub>OOD</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.	IF mA				CMR V/μs (Min.)	V <sub>CM</sub> V		
ACPL-M483	SO5	4	-	-	-	0.12	0.12	0.10	30000	1000	3750	567*
ACPL-P483	Stretched SO6	4	-	-	-	0.12	0.12	0.10	30000	1000	3750	891*
ACPL-W483	Stretched SO6	4	-	-	-	0.12	0.12	0.10	30000	1000	5000	1140*
ACPL-M484	SO5	4	-	-	-	0.12	0.15	0.13	30000	1000	3750	567*
ACPL-P484	Stretched SO6	4	-	-	-	0.12	0.15	0.13	30000	1000	3750	891*
ACPL-W484	Stretched SO6	4	-	-	-	0.12	0.15	0.13	30000	1000	5000	1140*
ACNV4506	500 mil DIP10	10	44	-	10	0.55	0.40	0.50	30000	1500	7500	2262*
ACPL-4800	300 mil DIP8	6	-	-	-	0.35	0.35	0.25	30000	1000	3750	630*
ACPL-M43U	SO5	10	32	80	10	1	1	0.9	15000	1000	3750	567*
ACPL-M46U	SO5	10	44	90	10	0.4	0.55	0.45	15000	1000	3750	567*
ACPL-A456	Stretched SO6	10	44	>90	10	0.55	0.45	0.45	15000	1500	3750	891*
ACPL-W456	Stretched SO6	10	44	>90	10	0.55	0.45	0.45	15000	1500	5000	1140*
ACPL-P480	Stretched SO6	6	-	-	-	0.35	0.35	0.25	20000	1000	3750	891*
ACPL-W480	Stretched SO6	6	-	-	-	0.35	0.35	0.25	20000	1000	5000	1140
ACPL-P481	Stretched SO6	6	-	-	-	0.35	0.35	0.25	20000	1000	3750	891*
ACPL-W481	Stretched SO6	6	-	-	-	0.35	0.35	0.25	20000	1000	5000	1140*
ACPL-K453	Stretched SO8	16	19	50	16	1.00	1.00	1.00	15000	1500	5000	1140*
ACPL-P454	Stretched SO6	12	26	65	12	1.14	1.00	1.30	15000	1500	3750	891*
ACPL-W454	Stretched SO6	12	26	65	12	1.14	1.00	1.30	15000	1500	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
HCPL-0452	SO8	16	19	50	16	1.0	1.0	-	1000	10	3750	560*
HCPL-0453	SO8	16	19	50	16	1.0	1.0	1.0	15000	1500	3750	560*
HCPL-0454	SO8	12	26	65	12	1.4	1.0	-	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-J454	300 mil DIP8	12	21	65	12	0.7	0.5	1.3	15000	1500	3750	891
HCNW4506	400 mil DIP8	10	44	>90	10	0.55	0.40	-	15000	1500	5000	1414
HCPL-J456	300 mil DIP8	10	44	>90	10	0.55	0.40	0.45	15000	1500	3750	891
HCPL-M452	SO5	16	20	50	16	1.0	1.0	-	1000	10	3750	567*
HCPL-M453	SO5	16	20	50	16	1.0	1.0	1.0	15000	1500	3750	567*
HCPL-M454	SO5	12	26	65	12	1.4	1.0	1.3	15000	1500	3750	560*
HCPL-M456	SO5	10	44	>90	10	0.55	0.40	0.45	15000	1500	3750	560*
HCPL-0534	SO8	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*

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

## Line Receiver Product Selection

Part No.	Package	Output Collector Output mA Max.	$t_{PLH}$ $\mu\text{s}$ Max.	$t_{PHL}$ $\mu\text{s}$ Max.	CMR - $V/\mu\text{s}@V_{CM}$		$V_{ISO}$ $V_{RMS}$ Min.
					CMR $V/\mu\text{s}$ (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

## 20 mA Current Loop Transmitter/Receiver Product Selection

Part No.	Package	Data Rate kBd @ (meters)	$t_{PLH}$ $\mu\text{s}$ Max.	$t_{PHL}$ $\mu\text{s}$ Max.	CMR - $V/\mu\text{s}@V_{CM}$		$V_{ISO}$ $V_{RMS}$ Min.
					CMR $V/\mu\text{s}$ (Min.)	$V_{CM}$ V	
HCPL-4100	300 mil DIP8	20 (400)	1.6	1.0	1000	50	3750
CMOS compatible data input for HCPL-4100							
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

Part No.	Package	Input Threshold Current		Hysteresis mA typ	$t_{PLH}$ $\mu\text{s}$ Max.	$t_{PHL}$ $\mu\text{s}$ Max.	CMR - $V/\mu\text{s}@V_{CM}$		$V_{ISO}$ $V_{RMS}$ Min.	$V_{ORM}$ $V_{PEAK}$
		mA					CMR $V/\mu\text{s}$ (Min.)	$V_{CM}$ V		
		Min.	Max.							
ACPL-K370	Stretched SO8	1.96	3.11	1.2	40	15	600	140	3750/5000#	1140*
ACPL-K376	Stretched SO8	0.87	1.56	0.6	40	15	600	140	3750/5000#	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*

Note: # - with IEC/EN/DIN EN 60747-5-5 Option 060, # - with UL 5000VRMS/1 minute Option 020, \* - Advanced information, may subject to changes.

## High Linearity Analog Optocoupler Product Selection

Part No.	Package	Transfer Gain % Max.	DC Non-Linearity % Max.	CTR		$V_{ISO}$ $V_{RMS}$ Min.	$V_{ORM}$ 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

Note: \* - with IEC/EN/DIN EN 60747-5-5 Option 050.













## Wideband Analog/Video Optocoupler Product Selection

Part No.	Package	Bandwidth MHz typ	DC Non-Linearity % Max.	CTR % Min.	IMRR dB typ	$V_{ISO}$ $V_{RMS}$ Min.	$V_{ORM}$ V peak
HCNW4562	400 mil DIP8	+/-15	0.25	0.25	0.75	5000	1414*
HCPL-4562	300 mil DIP8	17	0.25	45	122	3750/5000*	630*

0.3%/°C gain temperature coefficient

Note: \* - with IEC/EN/DIN EN 60747-5-5 Option 060, # - with UL 5000VRMS/1 minute Option 020.






## Photo IC

	Package	Creepage (mm)	Clearance (mm)	Internal Clearance (mm)	IEC/EN/DIN EN 60747-5-5 V <sub>orm</sub> (V <sub>peak</sub> )	UL 1577 V <sub>iso</sub> (V <sub>rms</sub> )		
<b>SO5</b>		5.0	5.0	0.08	567	3750		
<b>Stretched SO6*</b>		ACPL-Pxxx		8.0	7.0	0.08	891	3750
		ACPL-Wxxx		8.0	8.0	0.08	1140	5000
		ACSL		4.5	4.9	0.08	567	2500/3750
<b>SO8</b>		4.8	4.9	0.08	567	3750		
		ACPL-Hxxx		8.0	7.0	0.08	891	3750
<b>Stretched SO8*</b>		ACPL-Kxxx		8.0	8.0	0.08	1140	5000
		ACPL-Cxxx		8.0	8.0	0.5	1414	5000
		ACFL-xxxx		8.0	8.0	0.08	1140	5000
<b>Stretched SO12</b>		8.0	8.0	0.08	1140	5000		
<b>Wide Body**</b>		ACNVxxxx		10.0	9.6	1.0	1414	5000
<b>10-Pin**</b>		ACNVxxxx		13.0	13.0	2.0	2262	7500





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

\*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 60747-5-5 V <sub>orm</sub> (V <sub>peak</sub> )	UL 1577 V <sub>iso</sub> (V <sub>rms</sub> )		
<b>SO16</b>		ACSL		4.5	4.9	0.08	567	2500
		8.3	8.3	0.5	1230	5000		
<b>8-Pin**</b>		7.4	7.1	0.08	630	3750		
		8.0	7.4	0.5	891	3750/5000		
<b>14.2mm SSO8*</b>		ACNT-Hxxx		14.2	14.2	0.5	2262	7500

## Digital Isolator

<b>SO8*</b>		4.0	4.0	-	-	2500		
<b>SO16*</b>		4.0	4.0	-	-	2500		
		8.1	8.1	-	-	2500		
		ACML		8.1	8.1	-	-	5600

\*Stretched Packages nonmenclature:

ACPL-Pxxx (Stretched SO6, 7mm clearance)

ACPL-Wxxx (Stretched SO6, 8mm clearance)

ACPL-Hxxx (Stretched SO8, 7mm clearance)

ACPL-Kxxx/ACPL-Cxxx (Stretched SO8, 8mm clearance)

ACNT-Hxxx (Stretched SO8, 14.2mm clearance)

ACFL-xxxxx (Stretched SO12, &gt;8.0mm clearance)

# Hermetically Sealed Optocouplers

## Hermetically Sealed High Speed Logic Gate Optocouplers

Commercial Part Number	Class H	DLA SMD Class H *	Class K	DLA SMD Class K *	Package				No. of Channels	Typical Data Rate	Common Mode @ VCM=50V	Input Current	Withstand Test Voltage	Supply Voltage Range
					8 pin DIP	16 pin DIP	16 pin FP	20 pad LCCC						
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-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-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-6430	HCPL-6431	5962-8957102	HCPL-643K	5962-8957104K				●	2	20Mbd	500V/μs	6-10 mA	1500 Vdc	5.25V
6N134	6N134/883B	8102801	HCPL-268K	5962-9801010K		●			2	10Mbd	1000V/μs	10-20 mA	1500 Vdc	5.5V
HCPL-5600	HCPL-5601	5962-9085501H	HCPL-560K	5962-9085501K	●				1	10Mbd	1000V/μs	10-20 mA	1500 Vdc	5.5V
HCPL-5630	HCPL-5631	8102802	HCPL-563K	5962-98010102K	●				2	10Mbd	1000V/μs	10-20 mA	1500 Vdc	5.5V
HCPL-5650	HCPL-5651	8102805			●				2	10Mbd	1000V/μs	10-20 mA	2500 Vdc	5.5V
HCPL-6630	HCPL-6631	8102803	HCPL-663K	5962-98010103K				●	2	10Mbd	1000V/μs	10-20 mA	1500 Vdc	5.5V
HCPL-6650	HCPL-6651	8102804	HCPL-665K	5962-98010104K			●		4	10Mbd	1000V/μs	10-20 mA	1500 Vdc	5.5V
HCPL-6650L	ACPL-6651L						●		4	10Mbd	1000V/μs	10-20 mA	1500 Vdc	3.3V
ACPL-2670L	ACPL-2672L	5962-0824203H	ACPL-268KL	5962-0824203K		●			2	10Mbd	1000V/μs	10-20 mA	1500 Vdc	3.3V
ACPL-5600L	ACPL-5601L	5962-0824201H	ACPL-560KL	5962-0824201K	●				1	10Mbd	1000V/μs	10-20 mA	1500 Vdc	3.3V
ACPL-5630L	ACPL-5631L	5962-0824202H	ACPL-563KL	5962-0824202K	●				2	10Mbd	1000V/μs	10-20 mA	1500 Vdc	3.3V
HCPL-1930	HCPL-1931	5962-8957201	HCPL-193K	5962-8957202K		●			2	10Mbd	1000V/μs	12.5-60 mA	1500 Vdc	5.5V

## Hermetically Sealed High Speed Transistor Optocouplers

Commercial Part Number	Class H	DLA SMD Class H *	Class K	DLA SMD Class K *	Package				No. of Channels	Typical Data Rate	Current Transfer Ratio	Input Current	Withstand Test Voltage	Supply Voltage Range
					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	12-20 mA	1500 Vdc	18V
HCPL-5500	HCPL-5501	5962-9085401H	HCPL-550K	5962-9085401K	●				1	700 Kbd	9% min	12-20 mA	1500 Vdc	18V
HCPL-5530	HCPL-5531	5962-8767902	HCPL-553K	5962-8767906K	●				2	700 Kbd	9% min	12-20 mA	1500 Vdc	18V
HCPL-6530	HCPL-6531	5962-8767903	HCPL-653K	5962-8767907K				●	2	700 Kbd	9% min	12-20 mA	1500 Vdc	18V
HCPL-6550	HCPL-6551	5962-8767904	HCPL-655K	5962-8767908K			●		4	700 Kbd	9% min	12-20 mA	1500 Vdc	18V

## Hermetically Sealed High Gain Optocouplers

Commercial Part Number	Class H	DLA SMD Class H *	Class K	DLA SMD Class K *	Package				No. of Channels	Typical Data Rate	Current Transfer Ratio	Input Current	Withstand Test Voltage	Supply Voltage Range
					8 pin DIP	16 pin DIP	16 pin FP	20 pad LCCC						
6N140A	6N140A/883B	8302401	HCPL-177K	5962-800201K		●			4	100 Kbd	300% min	0.5-5 mA	1500 Vdc	18V
HCPL-5700	HCPL-5701	5962-8981001	HCPL-570K	5962-981002K	●				1	100 Kbd	300% min	0.5-5 mA	1500 Vdc	18V
HCPL-5730	HCPL-5731	5962-978501	HCPL-573K	5962-8978503K	●				2	100 Kbd	300% min	0.5-5 mA	1500 Vdc	18V
HCPL-6730	HCPL-6731	5962-978502	HCPL-673K	5962-8978504K				●	2	100 Kbd	300% min	0.5-5 mA	1500 Vdc	18V
HCPL-6750	HCPL-6751	8302401	HCPL-675K	5962-800201K			●		4	100 Kbd	300% min	0.5-5 mA	1500 Vdc	18V
ACPL-6750L	ACPL-6751L						●		4	100 Kbd	300% min	0.5-5 mA	1500 Vdc	3.3V
ACPL-1770L	ACPL-1772L	5962-22703H	ACPL-177KL	ACPL-177KL		●			4	100 Kbd	300% min	0.5-5 mA	1500 Vdc	3.3V
ACPL-5700L	ACPL-5701L	5962-0822701H	ACPL-570KL	5962-822701K	●				1	100 Kbd	300% min	0.5-5 mA	1500 Vdc	3.3V
ACPL-5730L	ACPL-5731L	5962-0822702H	ACPL-573KL	5962-822702K	●				2	100 Kbd	300% min	0.5-5 mA	1500 Vdc	3.3V

Note: \*DLA SMD number does not include extensions for lead form and finish.

## Hermetically Sealed AC/DC to Logic Interface Optocouplers

Commercial Part Number	Class H	DLA SMD Class H *	Class K	DLA SMD Class K *	8 pin DIP	No. of Channels	Typical Data Rate	Input Threshold Current	Output Current	Withstand Test Voltage
HCPL-5760	HCPL-5761	5962-894770I	HCPL-576K	5962-8947702K	●	1	100 KHz	2.5 mA TH+	2.6 mA	1500 Vdc

## Hermetically Sealed Power MOSFET

Commercial Part Number	Class H	DLA SMD Class H *	Class E	DLA 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-711I	5962-931400IH	HSSR-711E	5962-931400IE	●	1	90 V	1.0 Ohm	0.8 A ac 1.6 A dc	10 $\mu$ A	10-20mA	1500 Vdc
	HSSR-7112	5962-9314002H			●	1	90 V	1.0 Ohm	0.8 A ac 1.6 A dc	10 $\mu$ A	5-20mA	1500 Vdc

## Hermetically Sealed Analog Isolation Amplifier

Commercial Part Number	Class H	DLA SMD Class H *	Class E	DLA SMD Class E *	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-785I	5962-975570IH	ACPL-785E	5962-975570IE	●	1	5	0.1	11	5000	100	0.6

## Hermetically Sealed Intelligent Power Module and Gate Drive Interface

Commercial Part Number	Class H	DLA SMD Class H *	Class K	DLA 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-530I	5962-968520IH	HCPL-530K	5962-968520IK	●	1	2MBd	30 % Min.	10-20 mA	10kV/ $\mu$ s	1500 Vdc


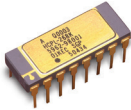

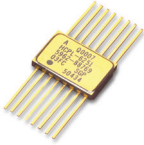
# Hermetically Sealed Optocouplers

## Hermetically Sealed Gate Drive Optocoupler

Commercial Part Number	Class H	DLA SMD Class H *	Package 8 pin DIP	Package 16 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/μs	1500 Vdc
HCPL-5150	HCPL-5151	5962-0420501H	•		1	0.5 A	13.5V Max.	9.5V Min.	10-18 mA	10kV/μs	1500 Vdc
ACPL-5160	ACPL-5161			•	1	2.0 A	13.5V Max.	11.2V Typ.	•	9kV/μs	1500 Vdc
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											

Note: \*LA 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 Sensor

Part Number	Size (LxWxH) (mm)	Supply Voltage (V)	ALS Dynamic Range	Max. Detection Distance	PS Output	ALS Output
APDS-9900	3.94 x 2.36 x 1.35	2.5 to 3.6	0.01 to 10k lux	Near zero to 100mm	I2C Digital count output	I2C Digital count output
APDS-9901	3.94 x 2.36 x 1.35	2.5 to 3.6	0.01 to 10k lux	Near zero to 100mm	I2C Digital count output	I2C Digital count output
APDS-9930	3.94 x 2.36 x 1.35	2.2 to 3.6	0.01 to 30k lux	Near zero to 100mm	I2C Digital count output	I2C Digital count output

### Integrated Ambient Light, RGB and Proximity Sensor

Part Number	Size (LxWxH) (mm)	Supply Voltage (V)	Max. Detection Distance	PS Output	ALS Output	RGB Output
APDS-9950	3.94 x 2.36 x 1.35	2.5 to 3.5	Near zero to 100mm	I2C Digital count output	I2C Digital count output	I2C Digital count output

### Integrated Ambient Light, RGB, Proximity and Gesture Sensor

Part Number	Size (LxWxH) (mm)	Supply Voltage (V)	Max. Detection Distance	PS Output	ALS Output	RGB Output	Gesture Output
APDS-9960	3.94 x 2.36 x 1.35	2.4 to 3.6	Near zero to 100mm	I2C Digital count output	I2C Digital count output	I2C Digital count output	I2C Digital count output

### Optical Proximity Sensor

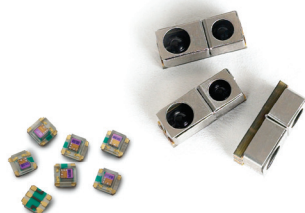
Part Number	Size (LxWxH) (mm)	Supply Voltage (V)	Max. Detection Distance	PS Output
HSDL-9100-021	7.10 x 2.75 x 2.7		Near zero to 100mm	Analog
HSDL-9100-024	7.10 x 2.75 x 2.4		Near zero to 100mm	Analog
APDS-9190	3.94 x 2.36 x 1.35	2.5 to 3.6	Near zero to 100mm	I2C Digital count output
APDS-9130	3.94 x 2.36 x 1.35	2.2 to 3.6	Near zero to 100mm	I2C Digital count output

### Proximity Sensing Conditioning IC

Part Number	Size	Supply Voltage (V)	Max. Detection Distance	PS Output
APDS-9700	QFN 2 mm x 2 mm	2.4 to 3.6	Near zero to 60mm	Analog (with HI/LO digital o/p)
APDS-9702	QFN 2 mm x 2 mm	2.4 to 3.6	Near zero to 60mm	Analog (with HI/LO digital o/p)

### Ambient Light Sensor

Part Number	Size (LxWxH) (mm)	Package	Supply Voltage (V)	Typical Output Current @ 100 Lux (µA)
APDS-9005	1.60 x 1.5 x 0.55	6 pin - ChipLED	1.8 to 5.5	40
APDS-9006	3.2 x 1.6 x 1.1	4 pin - ChipLED Reverse mounting	2.4 to 5.5	40
APDS-9007	2.4 x 2.0 x 0.8 x	6 pin - ChipLED	2.0 to 3.6	30 µA at 1klux (Logarithmic output)
APDS-9008	1.60 x 1.5 x 0.55	6 pin - ChipLED	1.6 to 5.5	40
APDS-9300	2.6 x 2.2 x 0.55	6 pin - ChipLED	2.4 to 3.0	I2C Digital count output
APDS-9301	2.6 x 2.2 x 0.55	6 pin - ChipLED	2.7 to 3.6	I2C Digital count output
APDS-9303	2.6 x 2.2 x 0.55	6 pin - ChipLED	2.7 to 3.6	SMBus Digital count output
APDS-9309	2.00 x 2.00 x 0.65	6 pin - ChipLED	2.4 to 3.0	I2C Digital count output



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