Avago Technologies Optoisolation Product Part Number System



Application Bulletin 102

Introduction

The following information is provided to assist in the understanding of the Avago Technologies optocoupler part number nomenclature identification. This document is intended as a general guide to the part-numbering system employed by each family.

This document is not intended as a selection guide, and does not contain parametric values for specific devices. For further information on specific products please refer to the respective data sheet. Some part numbers may not appear to fall in the categories contained herein. This does not indicate obsolescence but rather that the specific part number may not exactly match the generalizations in this document. For part numbers not exactly matching the descriptions in this document, please download the appropriate data sheet from Avago Technologies' web site (http://www.avagotech.com) or contact your nearest Avago Technologies representative.

Index of Part Numbering System

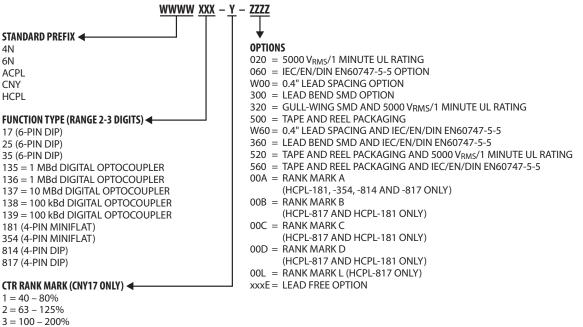
Avago Technologies Optocouplers are divided into six main product families and offered in nine packages. For convenience, two tables are provided in this article – one sorted by Product Family (Table 1) and the other sorted by package (Table 2).

Product Family	Description	Figure
Phototransistor Optocouplers and Digital Optocouplers	SO-4, DIP-4, DIP-6 Phototransistor Optocouplers Digital Optocouplers	1, 2a
Analog Optocouplers	High Linearity, High Bandwidth Analog Optocouplers	3
Gate Driver Optocouplers	Single and Dual Channel Isolated IGBT Gate Drivers	4
Isolated Amplifiers	Miniature Isolation Amplifiers	5
IPM Interface Optocouplers	Intelligent Power Module Interface Optocouplers	6
Other	Current Loop Transmitter/Receiver and AC/DC to Logic Interface	7

Table 1. Index of Part Numbering System by Product Family

Part Number	Package	Figure
HCPL-XXX	SO-4	8
ACPL-MXXX/HCPL-MXXX	SO-5	9
ACPL-XXXX/HCPL-0XXX	SO-8	10
HCPL-XXX	300 Mil DIP-4	11
ACPL-WXXX, ACPL-PXXX, ACPL-KXXX	SS0-6 and SSO-8	2a
4NXX, CNY17	300 Mil DIP-6	12
ACPL-XXXX, HCPL-XXXX, 6N13X	300 Mil DIP-8	13a, 13b
ACPL-JXXX, HCPL-JXXX	300 Mil DIP-8 (Jade)	14
ACNWXXX, HCNRXXXX, HCNWXXXX	400 Mil Wide Body DIP-8	15
ACNV-XXXX	500 Mil Wide Body DIP-10	17
ACPL-XXXJ, HCPL-XXXJ	SO-16 (Jade)	16

PHOTOTRANSISTOR AND DIGITAL OPTOCOUPLERS # 1



4 = 160 - 320%

Figure 1. Phototransistor Optocouplers

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".

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.

DIGITAL OPTOCOUPLERS # 2

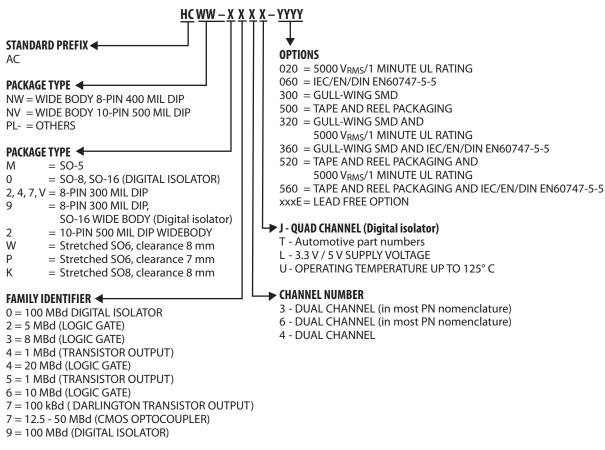
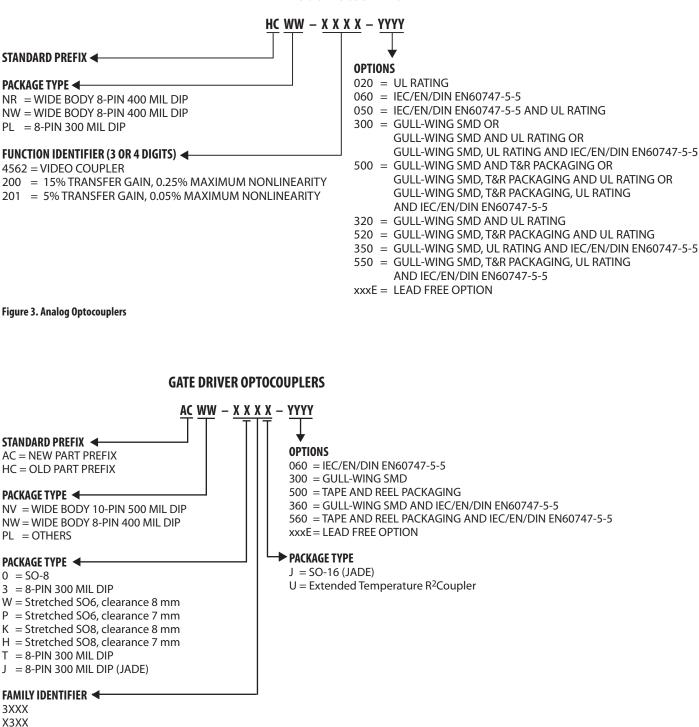


Figure 2a. Digital Optocouplers

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".

^{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.

ANALOG OPTOCOUPLERS



Notes:

Figure 4. Gate Driver Optocouplers

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.

^{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".

MINATURE ISOLATED AMPLIFIERS

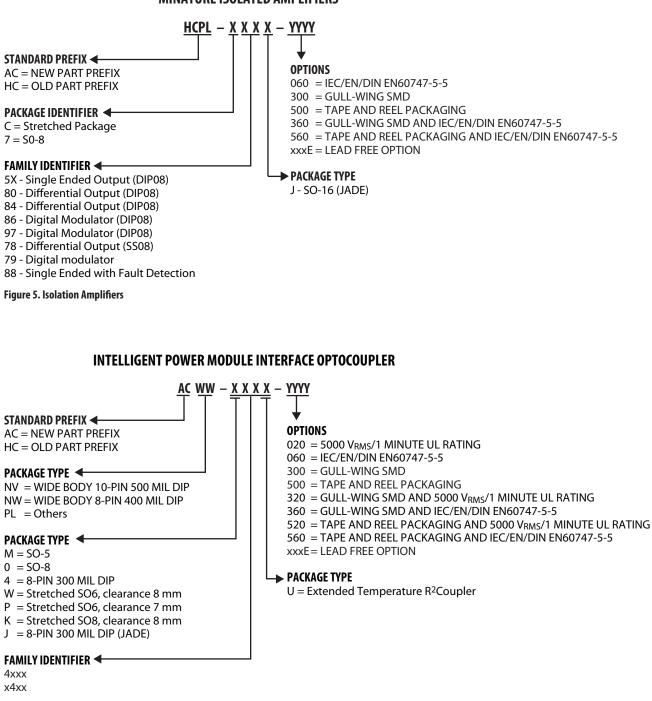


Figure 6. Intelligent Power Module Interface Optocoupler

Notes:

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.

^{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".

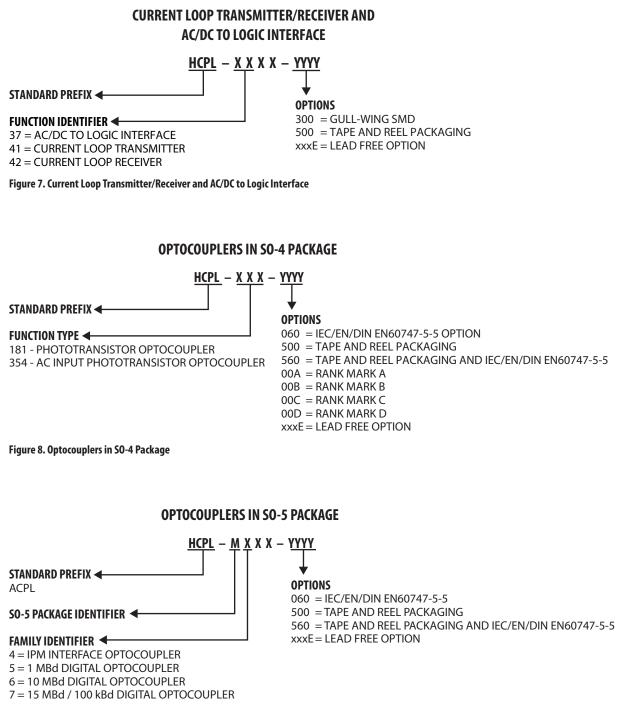


Figure 9. Optocouplers in SO-5 Package

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".

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OPTOCOUPLERS IN SO-8 PACKAGE

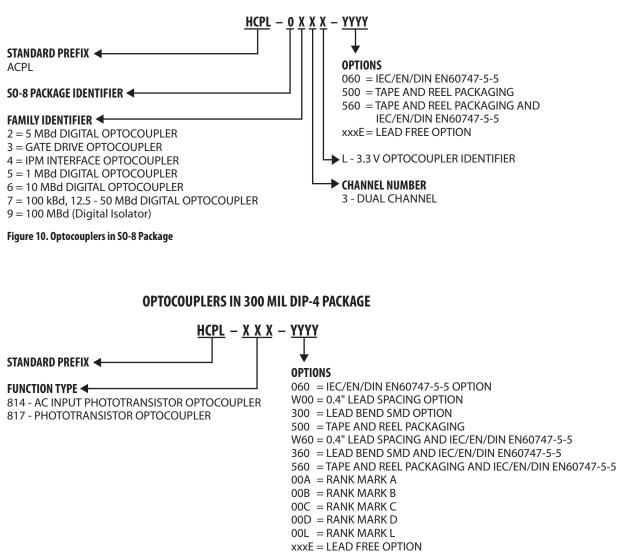
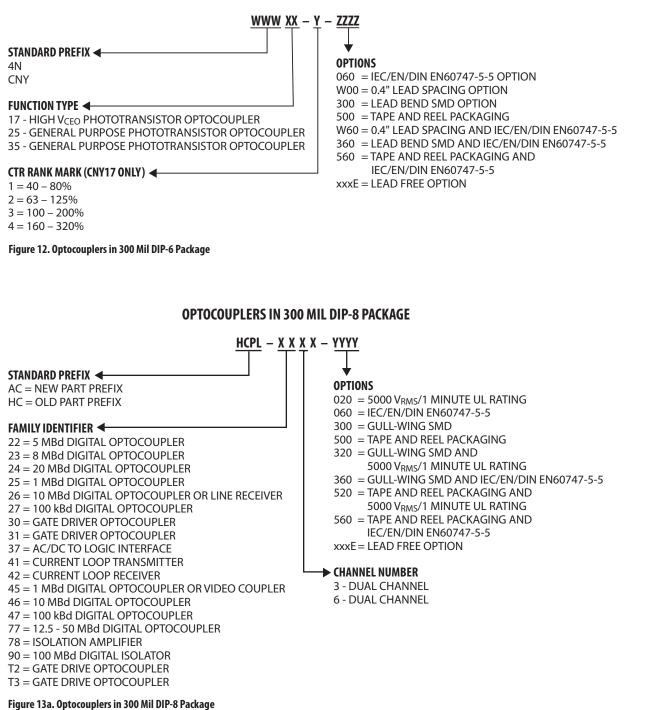


Figure 11. Optocouplers in 300 Mil DIP-4 Package

^{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".

^{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.

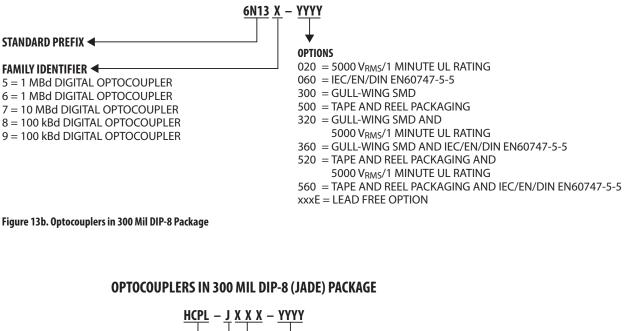
OPTOCOUPLERS IN 300 MIL DIP-6 PACKAGE



^{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".

^{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.

OPTOCOUPLERS IN 300 MIL DIP-8 PACKAGE



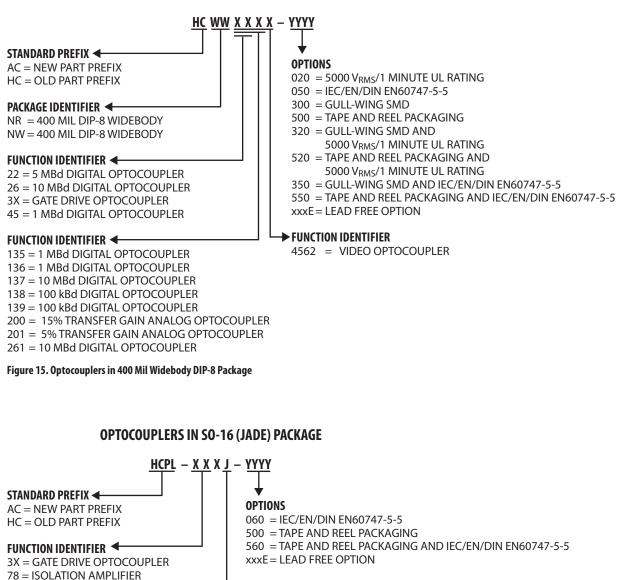
HCPL - J X X X - YYYY STANDARD PREFIX ← AC = NEW PART PREFIX HC = OLD PART PREFIX HC = OLD PART PREFIX PACKAGE IDENTIFIER ← 300 MIL DIP-8 (JADE) FAMILY IDENTIFIER ← 31 = GATE DRIVER OPTOCOUPLER 45 = 1 MBd DIGITAL OPTOCOUPLER

Figure 14. Optocouplers in 300 Mil DIP-8 (Jade) Package

^{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".

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OPTOCOUPLERS IN 400 MIL DIP-8 WIDEBODY PACKAGE



SO-16 (JADE) PACKAGE IDENTIFIER

Figure 16. Optocouplers in SO-16 (Jade) Package

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OPTOCOUPLERS IN 500 MIL DIP-10 WIDEBODY PACKAGE

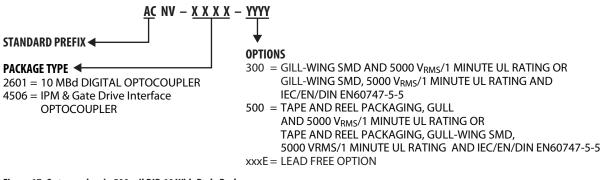


Figure 17. Optocouplers in 500 mil DIP-10 WideBody Package

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

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