

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).

Table 1. Index of Part Numbering System by Product Family

Product Family	Description	Figure
Phototransistor Optocouplers and Digital Optocouplers	SO-4, DIP-4, DIP-6 Phototransistor Optocouplers Digital Optocouplers	1, 2a, 2b
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
Other	Current Loop Transmitter/Receiver and AC/DC to Logic Interface	6

Table 2. Index of Part Numbering System by Package

Part Number	Package	Figure
HCPL-XXX	SO-4	7
HCPL-MXXX	SO-5	8
HCPL-0XXX	SO-8	9
HCPL-XXX	300 Mil DIP-4	10
ACPL-WXXX, ACPL-PXXX, ACPL-KXXX	SSO-6 and SSO-8	2a
ACPL-W6X0, ACPL-P6X0, ACPL-K6X0	Stretched SO-6 / SO-8	2b
4NXX, CNY17	300 Mil DIP-6	11
HCPL-XXXX, 6N13X	300 Mil DIP-8	12a, 12b
HCPL-JXXX	300 Mil DIP-8 (Jade)	13
HCNRXXXX, HCNWXXXX	400 Mil Wide Body DIP-8	14
HCPL-XXXJ	SO-16 (Jade)	15

PHOTOTRANSISTOR AND DIGITAL OPTOCOUPLEDERS # 1

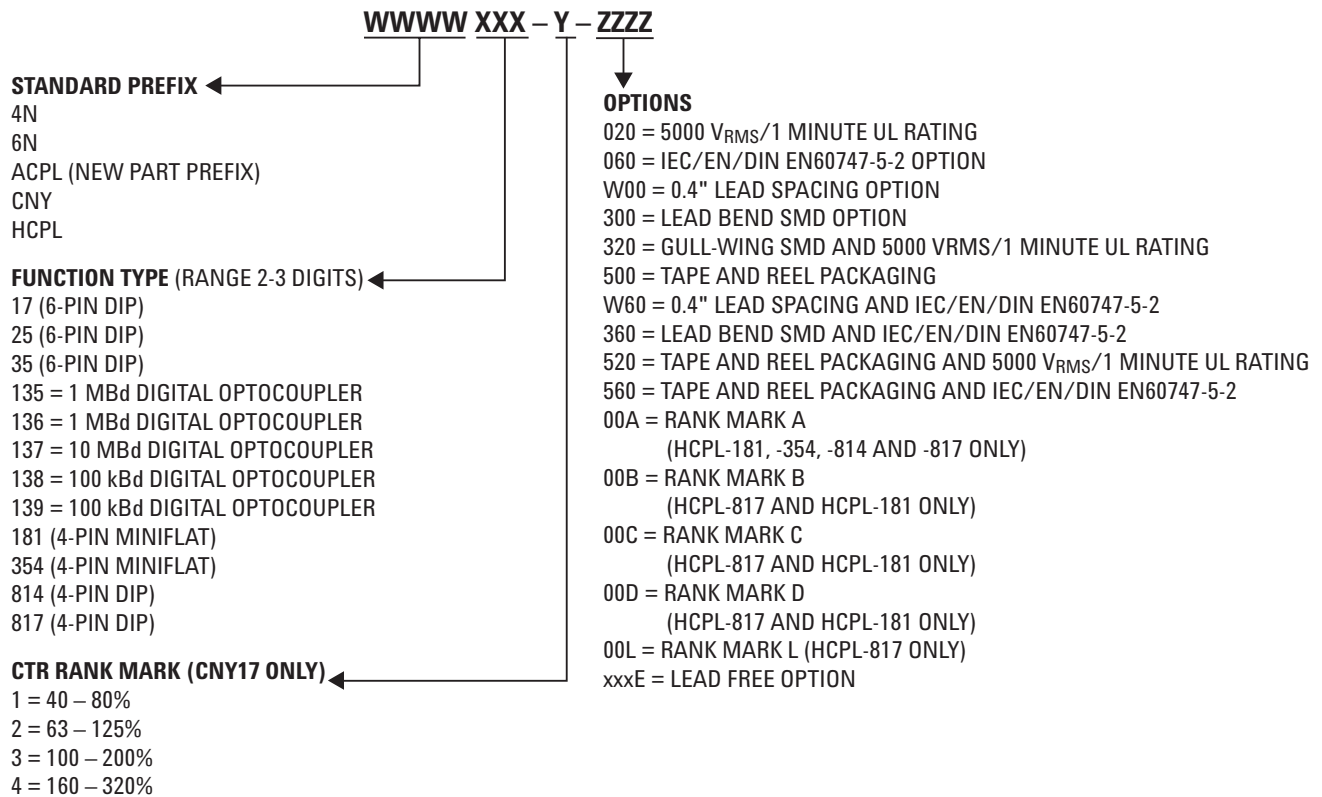


Figure 1. Phototransistor Optocouplers

Note 1: Option "xxx E" is available together with other options, for example option "560E" means "TAPE AND REEL PACKAGING. IEC/EN/DIN EN60747 5-2 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.

DIGITAL OPTOCOUPLERS # 2

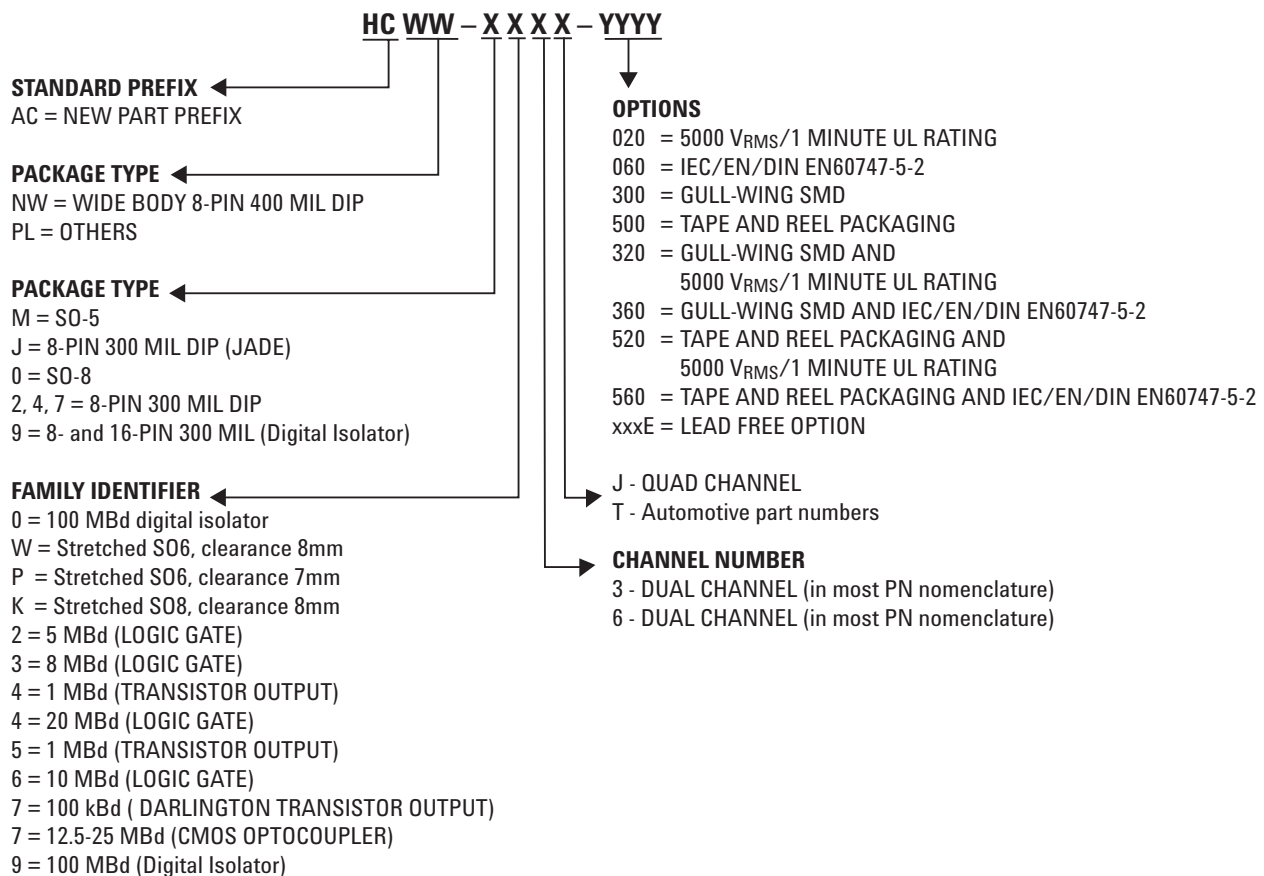


Figure 2a. Digital Optocouplers

ANALOG OPTOCOUPLERS

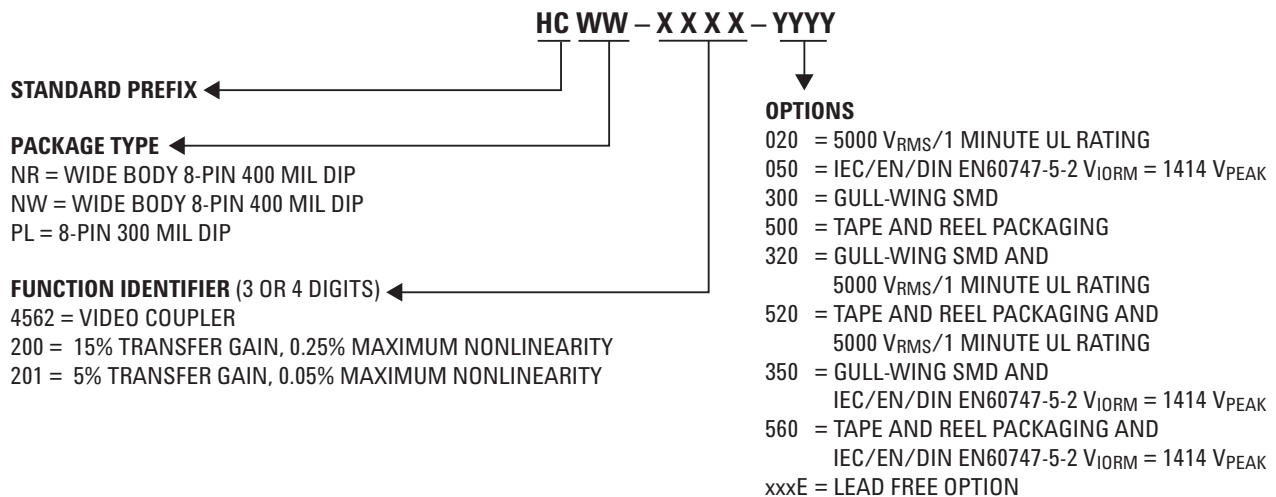


Figure 3. Analog Optocouplers

Note 1: Option "xxx E" is available together with other options, for example option "560 E" means "TAPE AND REEL PACKAGING, IEC/EN/DIN EN60747 5-2 AND LEAD FREE".

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GATE DRIVER OPTOCOUPLEDERS

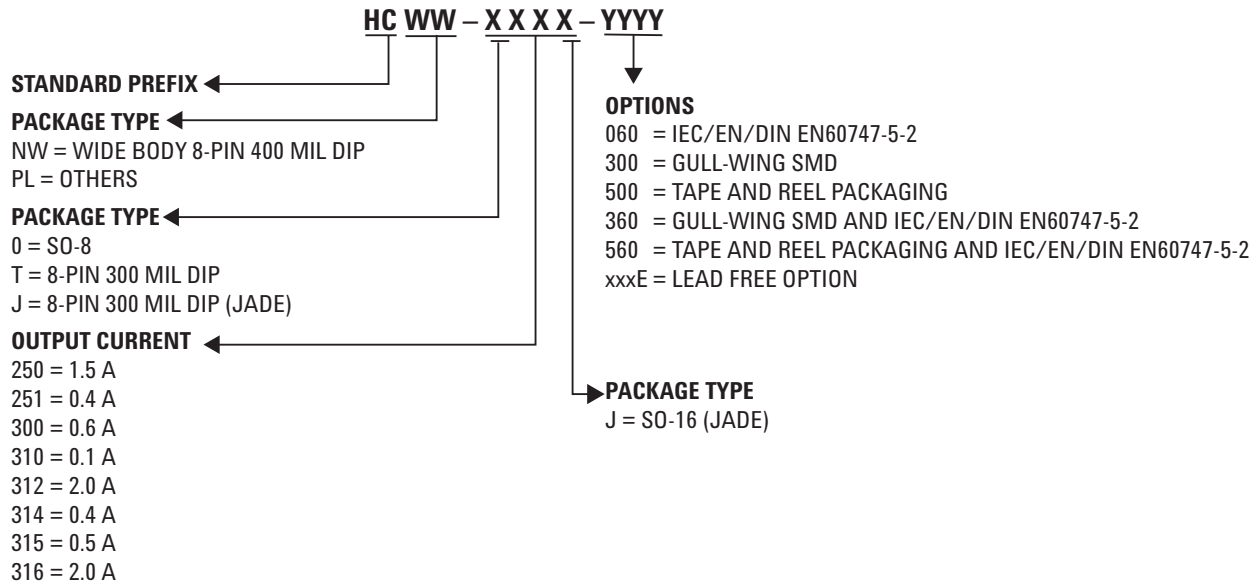


Figure 4. Gate Driver Optocouplers

ISOLATED AMPLIFIERS

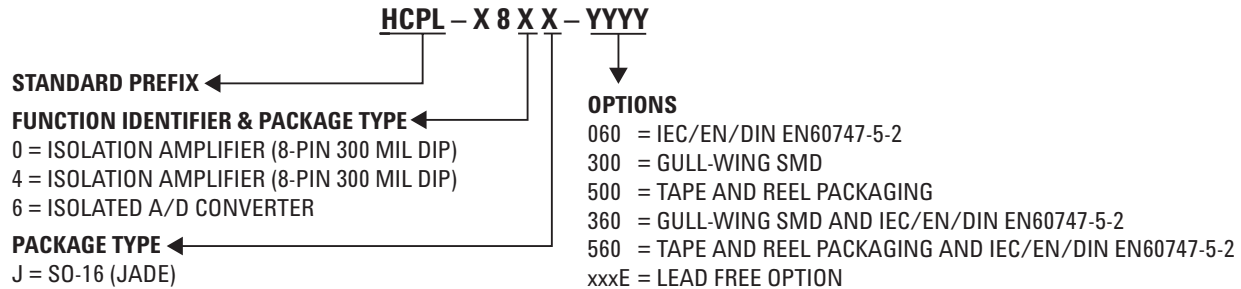


Figure 5. Isolation Amplifiers

CURRENT LOOP TRANSMITTER/RECEIVER AND AC/DC TO LOGIC INTERFACE

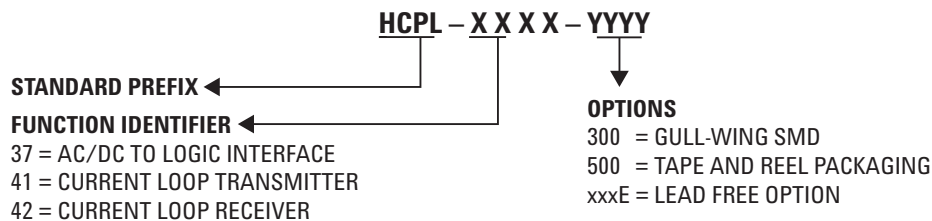


Figure 6. Current Loop Transmitter/Receiver and AC/DC to Logic Interface

Note 1: Option "xxxE" is available together with other options, for example option "560E" means "TAPE AND REEL PACKAGING, IEC/EN/DIN EN60747 5-2 AND LEAD FREE".

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OPTOCOUPLERS IN SO-4 PACKAGE

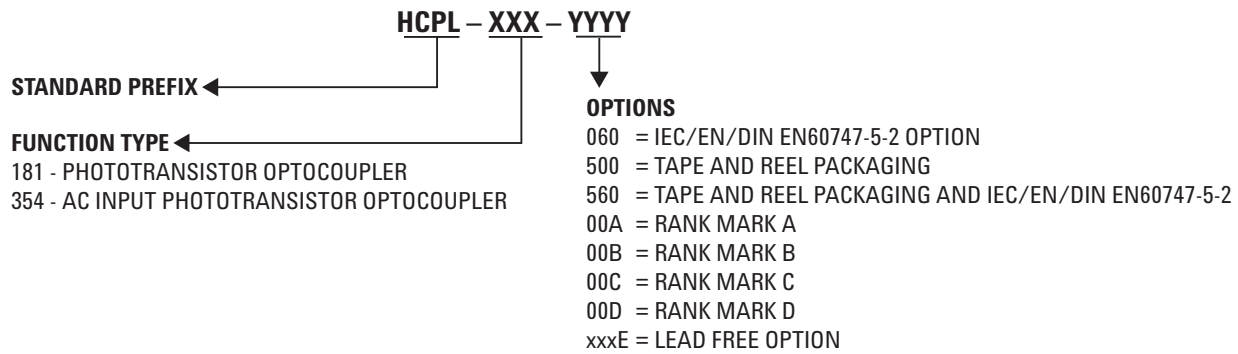


Figure 7. Optocouplers in SO-4 Package

OPTOCOUPLERS IN SO-5 PACKAGE

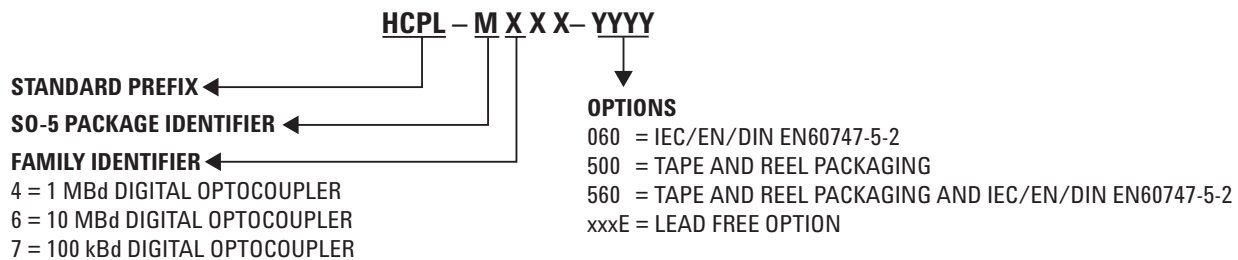


Figure 8. Optocouplers in SO-5 Package

OPTOCOUPLERS IN SO-8 PACKAGE

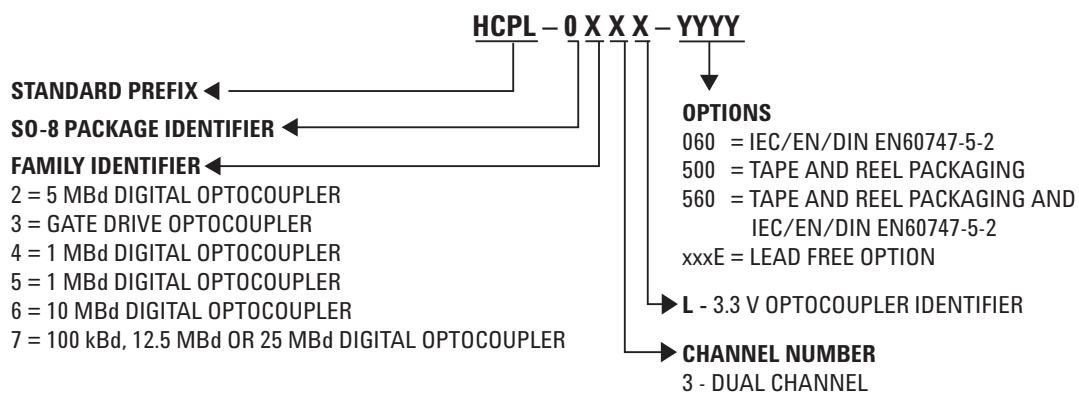


Figure 9. Optocouplers in SO-8 Package

Note 1: Option "xxxE" is available together with other options, for example option "560E" means "TAPE AND REEL PACKAGING, IEC/EN/DIN EN60747 5-2 AND LEAD FREE".

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OPTOCOUPLERS IN 300 MIL DIP-4 PACKAGE

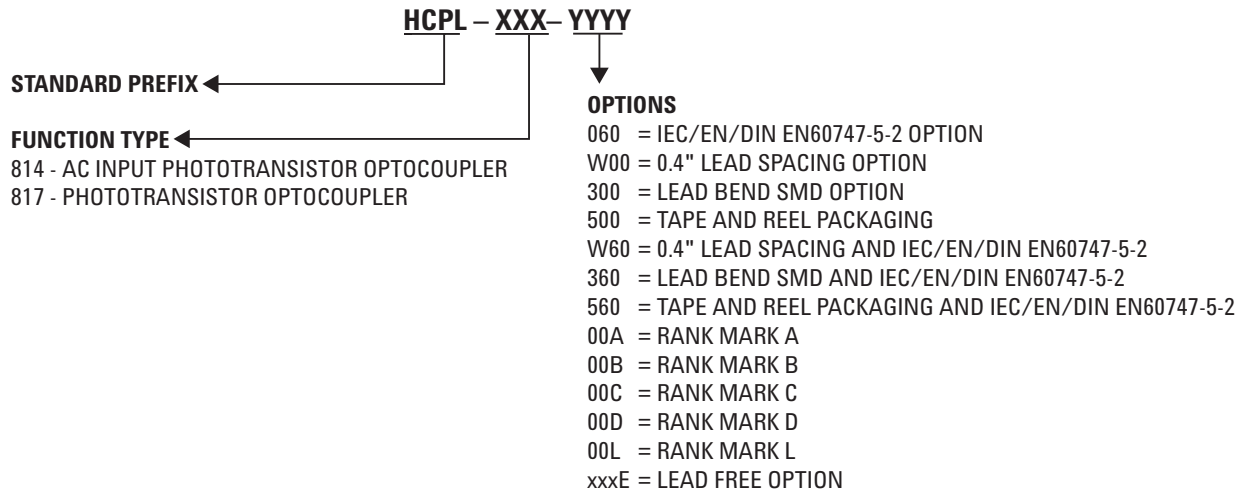


Figure 10. Optocouplers in 300 Mil DIP-4 Package

OPTOCOUPLERS IN 300 MIL DIP-6 PACKAGE

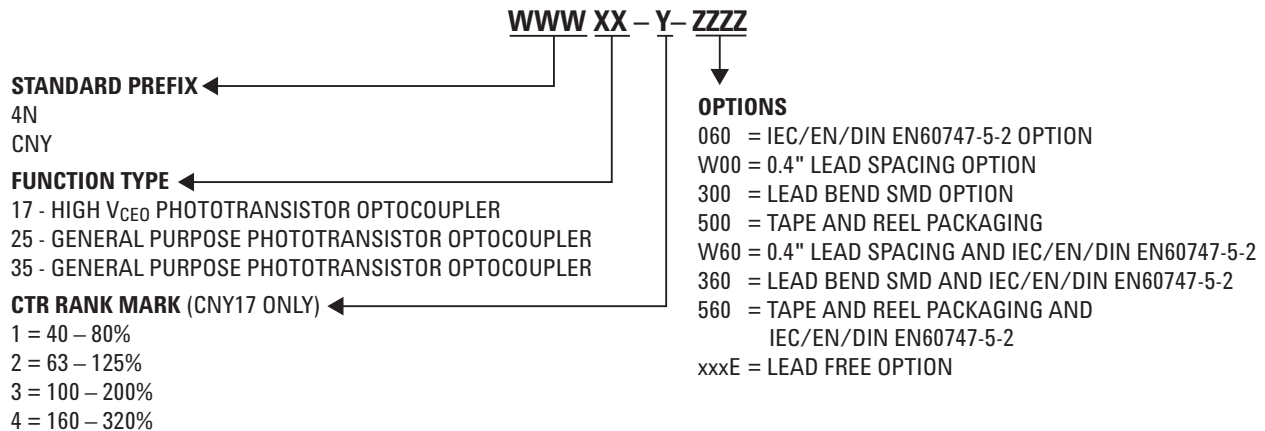


Figure 11. Optocouplers in 300 Mil DIP-6 Package

Note 1: Option "xxxE" is available together with other options, for example option "560E" means "TAPE AND REEL PACKAGING, IEC/EN/DIN EN60747 5-2 AND LEAD FREE".

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OPTOCOUPERS IN 300 MIL DIP-8 PACKAGE

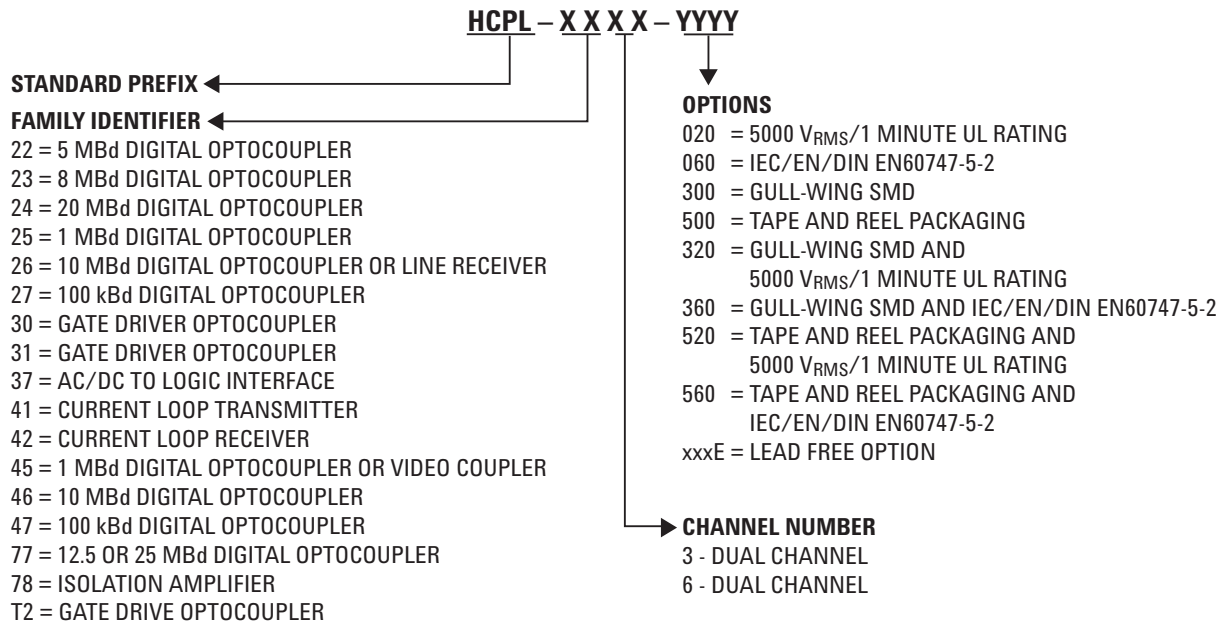


Figure 12a. Optocouplers in 300 Mil DIP-8 Package

OPTOCOUPERS IN 300 MIL DIP-8 PACKAGE

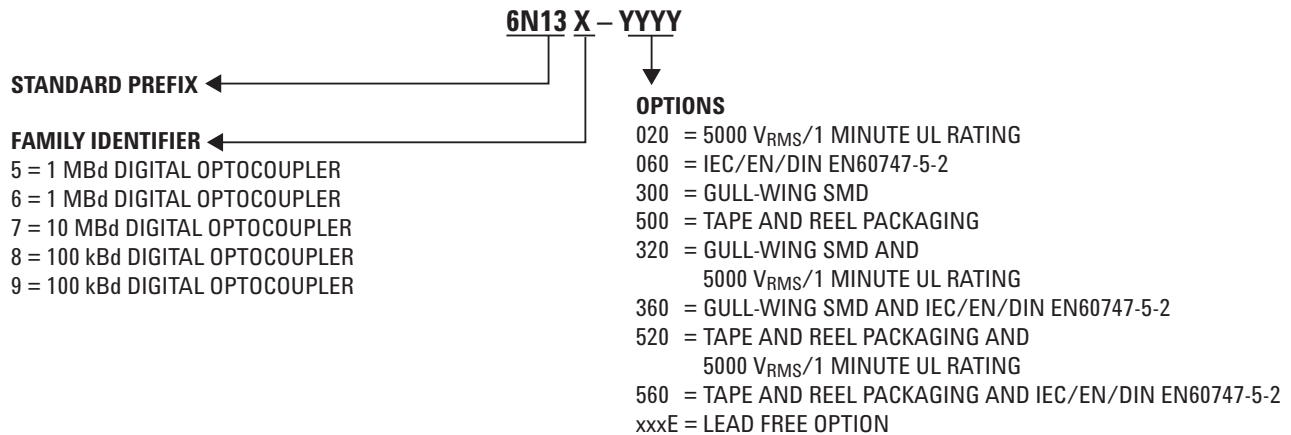


Figure 12b. Optocouplers in 300 Mil DIP-8 Package

Note 1: Option "xxx E" is available together with other options, for example option "560 E" means "TAPE AND REEL PACKAGING, IEC/EN/DIN EN60747 5-2 AND LEAD FREE".

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OPTOCOUPLERS IN 300 MIL DIP-8 (JADE) PACKAGE

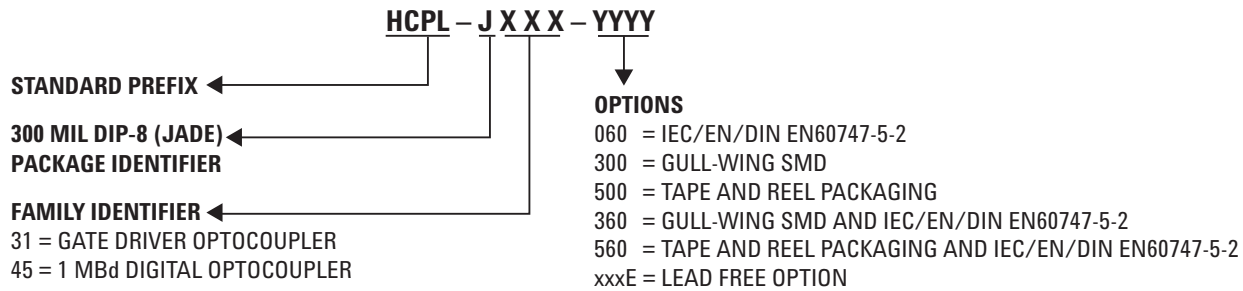


Figure 13. Optocouplers in 300 Mil DIP-8 (Jade) Package

OPTOCOUPLERS IN 400 MIL DIP-8 WIDEBODY PACKAGE

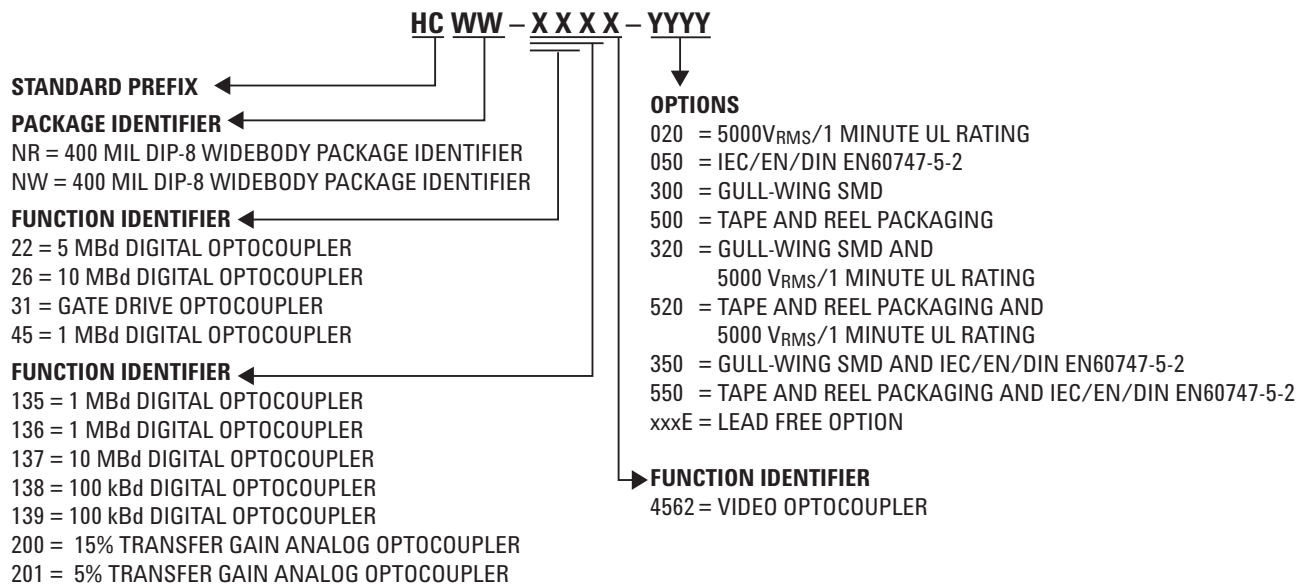


Figure 14. Optocouplers in 400 Mil Widebody DIP-8 Package

OPTOCOUPLERS IN SO-16 (JADE) PACKAGE

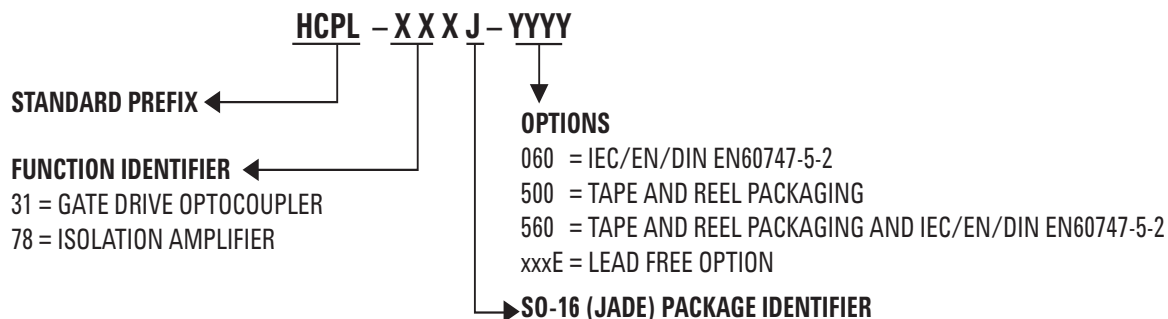


Figure 15. Optocouplers in SO-16 (Jade) Package

Note 1: Option "xxx E" is available together with other options, for example option "560 E" means "TAPE AND REEL PACKAGING, IEC/EN/DIN EN60747 5-2 AND LEAD FREE".

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

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AV01-0683EN - October 19, 2010

