# General Purpose Phototransistor Optocoupler

## Product Selection

<table>
<thead>
<tr>
<th>Device</th>
<th>Part No.</th>
<th>Package</th>
<th>CTR</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Channel 4 pin</td>
<td>HCPL-817*</td>
<td>DIP 300 mil</td>
<td>50</td>
<td>600</td>
<td>35</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>HCPL-181**</td>
<td>DIP 400 mil</td>
<td>50</td>
<td>100</td>
<td>35</td>
<td>*</td>
</tr>
</tbody>
</table>

| Single Channel 6 pin    | 4N25         | DIP 400 mil  | 20  | 70  | * | 1 |
|                         | 4N35         | DIP 300 mil  | 100 | 70  | * | 1 |
|                         | CNY17-1      | S04 300 mil  | 40  | 80  | 70 | * | 1 |
|                         | CNY17-2      | DIP 400 mil  | 63  | 125 | 70 | * | 1 |
|                         | CNY17-3      | S04 300 mil  | 100 | 200 | 70 | * | 1 |
|                         | CNY17-4      | DIP 300 mil  | 160 | 320 | 70 | * | 1 |

| AC Input Optocoupler    | HCPL-814     | DIP 400 mil  | 20  | 300 | 35 | * | 1 |
|                         | HCPL-814-00A | DIP 300 mil  | 50  | 150 | 35 | * | 1 |
|                         | HCPL-354     | S04 300 mil  | 20  | 400 | 35 | * | 1 |
|                         | HCPL-354-00A | S04 300 mil  | 50  | 150 | 35 | * | 1 |

## NOTES:
- VDE 0884 with option 06L
- Wide-lead spacing (10.16mm) with option W00
- * Option 00L, 00A, 00B, 00C, 00D is available
- ** Option 00A, 00B, 00C, 00D is available

In switched-mode power supplies, optocouplers are the preferred choice for providing isolated feedback for the regulation loop. For this application, they do an excellent job of isolation, minimizing circuit complexity and reducing cost.

### Other typical applications include:
- I/O or Microprocessor Interfacing
- Regulation Feedback Circuits in SMPS
- Interface between Logic Circuits
- Ground Loop Elimination
- Level Shifting

## Typical Switched-mode Power Supply Block Diagram

![Typical Switched-mode Power Supply Block Diagram](image)

## Programmable Logic Controller I/O Units

![Programmable Logic Controller I/O Units](image)
300 mil 4-pin DIP

400 mil 0.4” Lead Spacing Option

300 mil 4-pin Lead Bend SMD Option

300 mil 6-pin DIP

400 mil 6-pin 0.4” Lead Spacing Option

400 mil 6-pin Lead Bend SMD Option

4-pin Miniflat SMD

Option Nomenclatures
060 = VDE0884 Option
W00 = 0.4” Lead Spacing Option
300 = Lead Bend SMD Option
500 = Tape and Reel Packaging Option
00L = CTR: 50-100%
00A = CTR: 80-160%
00B = CTR: 130-260%
00C = CTR: 200-400%
00D = CTR: 300-600%

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