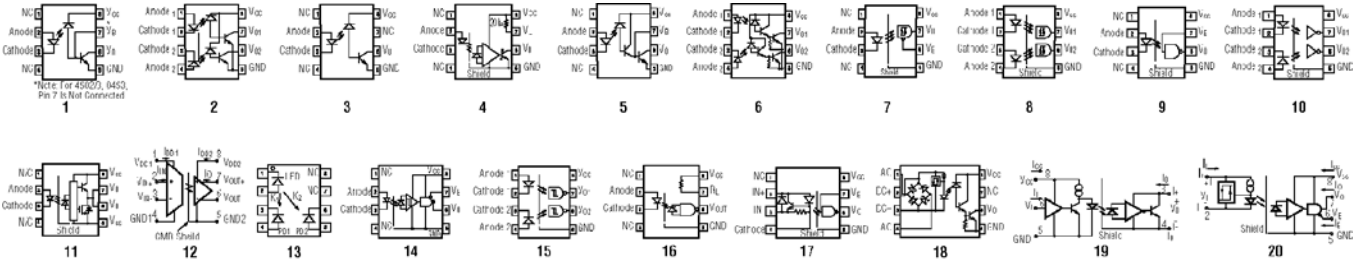


Optocouplers



1 MBd Transistor Output (6N135/6 Type)

| Mfr.'s Type | Fig. | Description                      | if<br>mA | CTR<br>Min. % | tprop<br>μs | CMR<br>V/μs Min. | Hermetic* |
|-------------|------|----------------------------------|----------|---------------|-------------|------------------|-----------|
| 6N135       | 1    | S08                              | 16.0     | 7             | 2.0         | 100              | Yes       |
| HCPL-0500   | 1    | S08 Surface Mount Package        | 16.0     | 7             | 2.0         | 100              | Yes       |
| 6N136       | 1    | S08                              | 16.0     | 19            | 1.0         | 100              | Yes       |
| HCPL-0501   | 1    | S08 Surface Mount Package        | 16.0     | 19            | 1.0         | 100              | Yes       |
| HCPL-2531   | 2    | Dual Channel 300 Mil DIL Package | 16.0     | 19            | 1.0         | 100              | Yes       |
| HCPL-4502   | 1    | S08                              | 16.0     | 19            | 1.0         | 100              | —         |
| HCPL-4503   | 1    | S08                              | 16.0     | 19            | 1.0         | 15 K             | —         |
| HCPL-4504   | 3    | S08                              | 12.0     | 26            | 1.0         | 10 K             | —         |
| HCPL-4506   | 4    | 8 Pin DIP 300 Mil                | 16.0     | 44            | 0.5         | 15 K             | Yes       |
| HCPL-0466   | 4    | S08 Surface Mount Package        | 16.0     | 44            | 0.5         | 15 K             | —         |

100 Kdb High Gain Transistor Output (6N138/9 Type)

|           |   |                                        |       |     |       |     |     |
|-----------|---|----------------------------------------|-------|-----|-------|-----|-----|
| 6N138     | 5 | 8 Pin DIP 300 Mil                      | 1.6   | 300 | 10.0  | 100 | Yes |
| HCPL-2730 | 6 | Dual Channel 300 Mil DIL Package       | 1.6   | 300 | 10.0  | 100 | Yes |
| 6N139     | 5 | 8 Pin DIP 300 Mil                      | 0.5   | 400 | 10.0  | 500 | Yes |
| HCPL-0701 | 5 | S08 Surface Mount Package              | 0.5   | 400 | 10.0  | 500 | Yes |
| HCPL-2731 | 6 | Dual Channel 300 Mil DIL Package       | 0.5   | 400 | 10.0  | 500 | Yes |
| HCPL-0731 | 6 | Dual Channel S08 Surface Mount Package | 0.5   | 400 | 10.0  | 500 | Yes |
| HCPL-4731 | 5 | Dual Channel 300 Mil DIL Package       | 40 μA | 800 | 500.0 | 1K  | —   |

5 MBd Logic Gate

|           |   |                                  |     |   |     |    |     |
|-----------|---|----------------------------------|-----|---|-----|----|-----|
| HCPL-2200 | 7 | 8 Pin DIP 300 Mil                | 1.6 | — | 0.3 | 1K | Yes |
| HCPL-0201 | 7 | S08 Surface Mount Package        | 1.6 | — | 0.3 | 1K | —   |
| HCPL-2231 | 8 | Dual Channel 300 Mil DIL Package | 1.6 | — | 0.3 | 1K | —   |
| HCPL-2211 | 7 | 8 Pin DIP 300 Mil                | 1.6 | — | 0.3 | 5K | —   |
| HCPL-0211 | 7 | S08 Surface Mount Package        | 1.6 | — | 0.3 | 5K | —   |
| HCNW2211  | 7 | VDE: 1414 V 400 Mil Package      | 1.6 | — | 0.3 | 5K | —   |
| HCPL-2232 | 8 | Dual Channel 300 Mil DIL Package | 1.6 | — | 0.3 | 5K | —   |

\*Hermetic devices available as commercial grade, Mil-Prf-38534 certified class H and class K.

1 MBd Transistor Output (6N135/6 Type)

| Mfr.'s Type | Fig. | Description                            | if<br>mA | CTR<br>Min. % | tprop<br>μs | CMR<br>V/μs Min. | Hermetic* |
|-------------|------|----------------------------------------|----------|---------------|-------------|------------------|-----------|
| 6N137       | 9    | 8 Pin DIP 300 Mil                      | 5.0      | —             | 0.1         | 100              | Yes       |
| HCPL-0600   | 9    | S08 Surface Mount Package              | 5.0      | —             | 0.1         | 100              | Yes       |
| HCPL-2630   | 10   | Dual Channel 300 Mil DIL Package       | 5.0      | —             | 0.1         | 100              | Yes       |
| HCPL-2601   | 9    | 8 Pin DIP 300 Mil                      | 5.0      | —             | 0.1         | 5 K              | Yes       |
| HCPL-0601   | 9    | S08 Surface Mount Package              | 5.0      | —             | 0.1         | 5 K              | Yes       |
| HCPL-2631   | 10   | Dual Channel 300 Mil DIL Package       | 5.0      | —             | 0.1         | 5 K              | Yes       |
| HCPL-2611   | 9    | 8 Pin DIP 300 Mil                      | 5.0      | —             | 0.1         | 10 K             | —         |
| HCPL-0661   | 10   | Dual Channel S08 Surface Mount Package | 5.0      | —             | 0.1         | 10 K             | —         |

\*Hermetic devices available as commercial grade, Mil-Prf-38534 certified class H and class K.

Integrate Gate Drive

| Mfr.'s Type | Fig. | if<br>mA | tprop<br>μs | CMR<br>V/μs Min. | Iout<br>A Min. |
|-------------|------|----------|-------------|------------------|----------------|
| HCPL-3120   | 11   | 7        | 0.5         | 15 K             | 2              |

Isolation Amp/Analog

Note: Hermetic package. Isolation amp available.

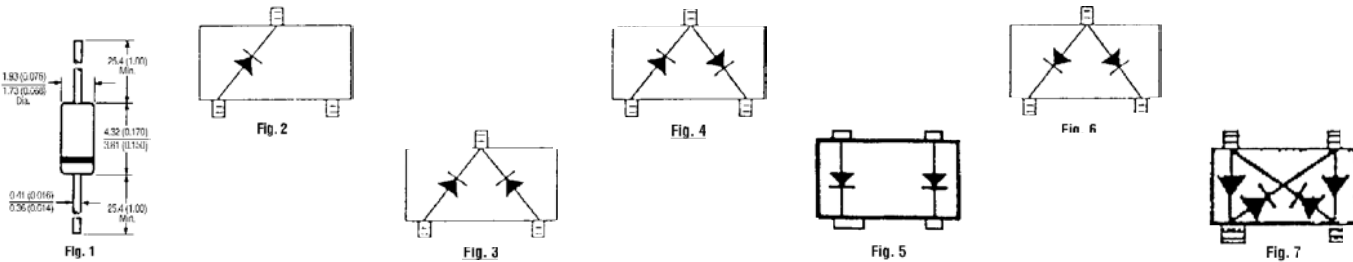
| Mfr.'s Type | Fig. | Non Linearity | B.W. Hz | Gain Tolerance |
|-------------|------|---------------|---------|----------------|
| HCPL-7800   | 12   | 0.35%         | 85.0 K  | 5%             |
| HCNR200     | 13   | 0.07%         | 1.5 M   | 15/5%          |
| HCNR201     | 13   | 0.07%         | 1.5 M   | 15/5%          |

Application Specific

| Mfr.'s Type | Fig. | Description                                                          | Hermetic* |
|-------------|------|----------------------------------------------------------------------|-----------|
| HCPL-4562   | 1    | Wideband Analog Video, 0.15% Non Linearity, 0.3%/°C Gain Temperature | —         |
| HCPL-2400   | 14   | Hi-Speed 20 mbd If = 4 mA, Single/Dual                               | Yes       |
| HCPL-2430   | 15   | Hi-Speed 20 mbd If = 4 mA, Single/Dual                               | Yes       |
| HCPL-2300   | 16   | Low Current If = 0.50 mA, 5 mbd                                      | —         |
| HCPL-2602   | 17   | Integrate Line Termination, 10 mbd                                   | Yes       |
| HCPL-3700   | 18   | AC/DC Voltage Sense Ith = 1.6 mA                                     | Yes       |
| HCPL-3760   | 18   | AC/DC Voltage Sense Ith = 1.6 mA                                     | Yes       |
| HCPL-4100   | 19   | 20 mA Current Loop Tx. Guaranteed 20 mA loop                         | —         |
| HCPL-4200   | 20   | 20 mA Current Loop Rx. Guaranteed 20 mA loop                         | —         |

\*Hermetic devices available as commercial grade, Mil-Prf-38534 certified class H and class K.

Diodes



Many of these diodes are also available in the ultra small SC-70 package.

Surface Mount Pin Diodes

| Mfr.'s Type   | Fig.          | Min. V <sub>en</sub> (V)<br>@ 10 μA | Max. C <sub>t</sub> (pF)<br>@ V <sub>b</sub> = 50 V<br>†V <sub>b</sub> = 20 V<br>‡V <sub>b</sub> = 5 V | Max. R <sub>s</sub> (Ω)<br>f = 100 MHz<br>†I <sub>r</sub> = 10 mA<br>‡I <sub>r</sub> = 5 mA | Typical Lifetime<br>t (ns)<br>I <sub>r</sub> = 50 mA,<br>I <sub>n</sub> = 250 mA<br>†I <sub>r</sub> = 10 mA,<br>I <sub>n</sub> = 6 mA |
|---------------|---------------|-------------------------------------|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
|               |               |                                     |                                                                                                        |                                                                                             |                                                                                                                                       |
| 5082-3080     | —             | 1                                   | 100                                                                                                    | 0.40                                                                                        | 1300                                                                                                                                  |
| 5082-3081     | —             | 1                                   | 100                                                                                                    | 8.40                                                                                        | 2500                                                                                                                                  |
| HSMP-3810-BLK | HSMP-3810-TR1 | 2                                   | 100                                                                                                    | 0.35                                                                                        | 1500                                                                                                                                  |
| HSMP-3814-BLK | HSMP-3814-TR1 | 3                                   | 100                                                                                                    | 0.35                                                                                        | 1500                                                                                                                                  |

Surface Mount Pin Diodes (continued)

| Mfr.'s Type   | Fig.          | Min. V <sub>en</sub> (V)<br>@ 10 μA | Max. C <sub>t</sub> (pF)<br>@ V <sub>b</sub> = 50 V<br>†V <sub>b</sub> = 20 V<br>‡V <sub>b</sub> = 5 V | Max. R <sub>s</sub> (Ω)<br>f = 100 MHz<br>†I <sub>r</sub> = 10 mA<br>‡I <sub>r</sub> = 5 mA | Typical Lifetime<br>t (ns)<br>I <sub>r</sub> = 50 mA,<br>I <sub>n</sub> = 250 mA<br>†I <sub>r</sub> = 10 mA,<br>I <sub>n</sub> = 6 mA |
|---------------|---------------|-------------------------------------|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
|               |               |                                     |                                                                                                        |                                                                                             |                                                                                                                                       |
| HSMP-3820-BLK | —             | 2                                   | 35                                                                                                     | 1.00†                                                                                       | 70†                                                                                                                                   |
| HSMP-3822-BLK | —             | 4                                   | 35                                                                                                     | 1.00†                                                                                       | 70†                                                                                                                                   |
| —             | HSMP-3830-TR1 | 2                                   | 200                                                                                                    | 0.30                                                                                        | 500                                                                                                                                   |
| HSMP-3890-BLK | —             | 2                                   | 50                                                                                                     | 0.30‡                                                                                       | 200                                                                                                                                   |