Optocouplers

*Note:1 or 4560/2, 9453,
Pin 7 is Not Connected

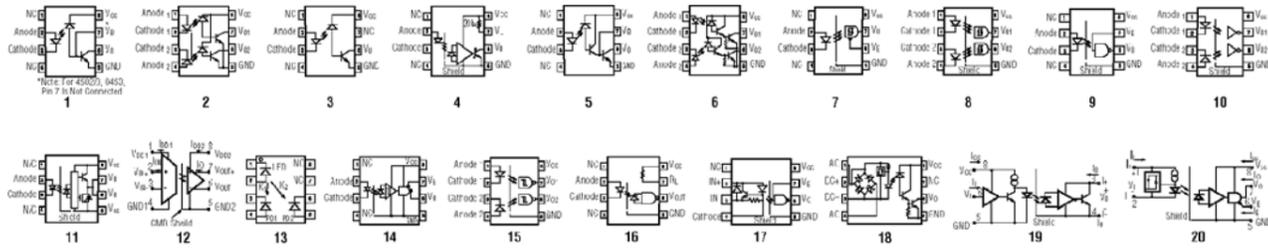## 1 MBd Transistor Output (6N135/6 Type)

Mfr.'s Type	Fig.	Description	if mA	CTR Min. %	tprop µs	CMR V/µs Min.	Hermetic*
6N135	1	SO8	16.0	7	2.0	100	Yes
HCPL-0500	1	SO8 Surface Mount Package	16.0	7	2.0	100	Yes
6N136	1	SO8	16.0	19	1.0	100	Yes
HCPL-0501	1	SO8 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	SO8	16.0	19	1.0	100	—
HCPL-4503	1	SO8	16.0	19	1.0	15 K	—
HCPL-4504	3	SO8	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	SO8 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	SO8 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 SO8 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	SO8 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	SO8 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 mA	CTR Min. %	tprop µs	CMR V/µs Min.	Hermetic*
6N137	9	8 Pin DIP 300 Mil	5.0	—	0.1	100	Yes
HCPL-0600	9	SO8 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	SO8 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 SO8 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 mA	tprop µs	CMR V/µs Min.	Iout 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.

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Diodes

Fig. 1, Fig. 2, Fig. 3, Fig. 4, Fig. 5, Fig. 6, Fig. 7
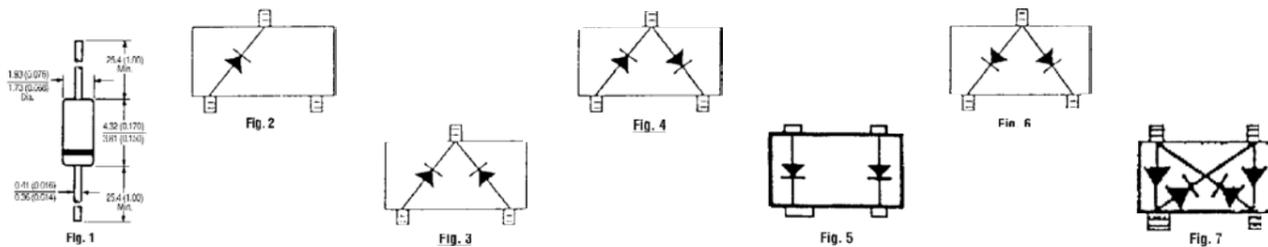
Many of these diodes are also available in the ultra small SC-70 package.

Surface Mount Pin Diodes

Mfr.'s Type Bulk	Tape and Reel	Fig.	Min. V$_{BR}$ (V) @ 10 µA	Max. C$_T$ (pF) @ V$_R$ = 50 V †V$_R$ = 20 V ‡V$_R$ = 5 V	Max. R$_S$ (Ω) f = 100 MHz †I$_F$ = 10 mA ‡I$_F$ = 5 mA	Typical Lifetime t (ns) I$_F$ = 50 mA, I$_R$ = 250 mA †I$_F$ = 10 mA, I$_R$ = 6 mA
5082-3080	—	1	100	0.40	2.5	1300
5082-3081	—	1	100	8.40	3.5	2500
HSMP-3810-BLK	HSMP-3810-TR1	2	100	0.35	4.0	1500
HSMP-3814-BLK	HSMP-3814-TR1	3	100	0.35	4.0	1500

Surface Mount Pin Diodes (continued)

Mfr.'s Type Bulk	Tape and Reel	Fig.	Min. V$_{BR}$ (V) @ 10 µA	Max. C$_T$ (pF) @ V$_R$ = 50 V †V$_R$ = 20 V ‡V$_R$ = 5 V	Max. R$_S$ (Ω) f = 100 MHz †I$_F$ = 10 mA ‡I$_F$ = 5 mA	Typical Lifetime t (ns) I$_F$ = 50 mA, I$_R$ = 250 mA †I$_F$ = 10 mA, I$_R$ = 6 mA
HSMP-3820-BLK	—	2	35	1.00†	0.6†	70†
HSMP-3822-BLK	—	4	35	1.00†	0.6†	70†
—	HSMP-3830-TR1	2	200	0.30	1.5	500
HSMP-3890-BLK	—	2	50	0.30‡	2.5‡	200