

## SMA Fiber-DIP, HFD3400 and HFE4400 Series (SMA-FD) LEDs and Integrated Receivers

The Fiber-DIP devices consist of a Base Part mounted in a Plastic SMA Fiber-DIP connector. LEDs and receivers are assembled to insure the best power output or responsivity for each dash number. For more information on the Base Part see page 15 for LEDs and page 17 for integrated receivers in this Selection Guide. Specifications are guaranteed limits.

### LEDs

Part #	Description	Base Part	Coupled Power Into Fiber				t <sub>r</sub> , t <sub>f</sub> ns	Pinout							
			μW	dBm	I <sub>f</sub> (mA)	Core (4)		1	2	3	4	5	6	7	8
<b>HFE4401</b> -012			3	-25	50	50	10	N	A	K	N	N	A	A	N
-013	Std.LED	HFE4020	6	-22	50	50	10	N	A	K	N	N	A	A	N
-014	Fiber-DIP	or	10	-20	50	50	10	N	A	K	N	N	A	A	N
-015	Package	HFE4070	15	-18	50	50	10	N	A	K	N	N	A	A	N
-016			25	-16	50	50	10	N	A	K	N	N	A	A	N
<b>HFE4403</b> -022	High Speed LED		3	-25	50	50	6	N	A	K	N	N	A	A	N
-023	Fiber DIP	HFE4073	6	-22	50	50	6	N	A	K	N	N	A	A	N
-024	Package		10	-20	50	50	6	N	A	K	N	N	A	A	N
-025			15	-18	50	50	6	N	A	K	N	N	A	A	N
-032	Highest-Speed LED		3	-25	50	50	3.5	N	A	K	N	N	A	A	N
-033	Fiber DIP	HFE4073	6	-22	50	50	3.5	N	A	K	N	N	A	A	N
-034	Package		10	-20	50	50	3.5	N	A	K	N	N	A	A	N
-035			15	-18	50	50	3.5	N	A	K	N	N	A	A	N

### Digital Integrated Receivers (TTL Output, V<sub>cc</sub>=5.0V)

Part #	Description	Base Part	Sensitivity <sup>(1)</sup>		I <sub>cc</sub> mA	P.W.D. ns <sup>(3)</sup>	Output (2)	Pinout							
			μW	dBm				1	2	3	4	5	6	7	8
<b>HFD3402</b> -002	Differentiating, 10Mbps	HFD3020-002	0.6	-32	20	50	Inv.	N	V	N	N	N	O	G	N
-003	Differentiating, 10Mbps	HFD3020-002	0.6	-32	20	50	Inv.	N	V	G	N	N	O	G	N
<b>HFD3403</b> -002	Direct Coupled, 5Mbps	HFD3023-002	2.8	-25	15	60	Inv.	N	V	G	N	N	O	G	N

### Analog Integrated Receivers (V<sub>cc</sub>=5.0V)

Part #	Description	Base Part	Responsivity <sup>(1)</sup>		Bandwidth (Typical) MHz	Output (RMS) Noise	I <sub>cc</sub> mA	Pinout							
			mV/μW					1	2	3	4	5	6	7	8
<b>HFD3401</b> -002	Linear Output	HFD3026 -002	4		35	0.35mV	10	N	O	N	N	N	V	G	N
-003	Linear Output	HFD3026 -002	4		35	0.35mV	10	N	O	G	N	N	V	G	N

- Notes:
1. Receiver sensitivity and responsivity are measured using a 100/140 micron fiber optic cable.
  2. Inv.= Output is low (<0.4 volts) when light is striking the device.
  3. Pulse Width Distortion is measured at 1.5 volts with an input signal of 100μW, 2.5MHz, 50% duty cycle.
  4. Fiber Core is 50/125 micron (50).

## Package Information - SMA Fiber DIP style

All dimensions are in inches [millimeters].

Pinout Definition
A = Anode
C = Capacitor
G = Ground (Case)
I = Input
K = Cathode
N = Not Used
O = Output
V = +V (V <sub>cc</sub> )

