

HFD Series (1060; 1100)

T-41-67

Features

- 600 V/10⁻⁶ S Slew Rate Amplifier
- Groundable Case
- Temperature and Voltage Stable
- Low Voltage Operation
- Shielded Amplifier
- Wide Spectral Range

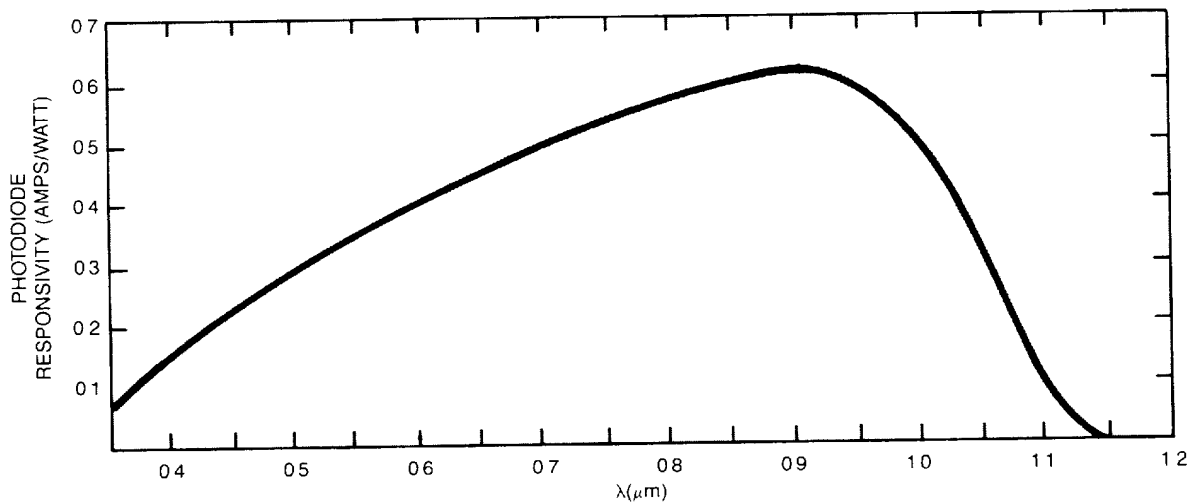
Operating Data and Specifications at 23°C Performance at -15 V Bias (Photodiode) and ±5 V (Amplifier)

Characteristic	Minimum	Typical	Maximum	Units
Active Area	—	1.5	—	Sq. mm (HFD-1060)
Active Area	—	5.1	—	Sq. mm (HFD-1100)
Responsivity	5	6	—	10 ⁴ V/W (850 nm); R _f = 100 K ohms
Responsivity	3.5	4	—	10 ⁴ V/W (633 nm); R _f = 100 K ohms
Frequency Range ¹	DC	—	1.2	GHz
Noise Voltage	—	700	—	10 ⁻⁶ V RMS; R _f = 100 K ohms
Minimum Detectable Power	—	1.2	—	10 ⁻⁸ W at 850 nm; R _f = 100 K ohms
Minimum Detectable Power	—	1.3	—	10 ⁻⁸ W at 633 nm; R _f = 100 K ohms
Open Loop Gain	—	300	—	R _L ≥ 150 ohms
Bias Current ²	—	5	—	10 ⁻⁶ A
Offset Current	—	3	—	10 ⁻⁶ A
Offset Voltage ³	—	2	—	mV
Offset Voltage Drift	—	5	—	10 ⁻⁶ V/°C
Output Resistance	—	10	—	Ohms
Slew Rate	300	—	600	V/10 ⁻⁶ S
Supply Voltage	±5	—	±12	V
Supply Current	8	—	14	mA
Power Consumption	80	220	336	mW
Operating Temperature	0	—	70	°C

Notes

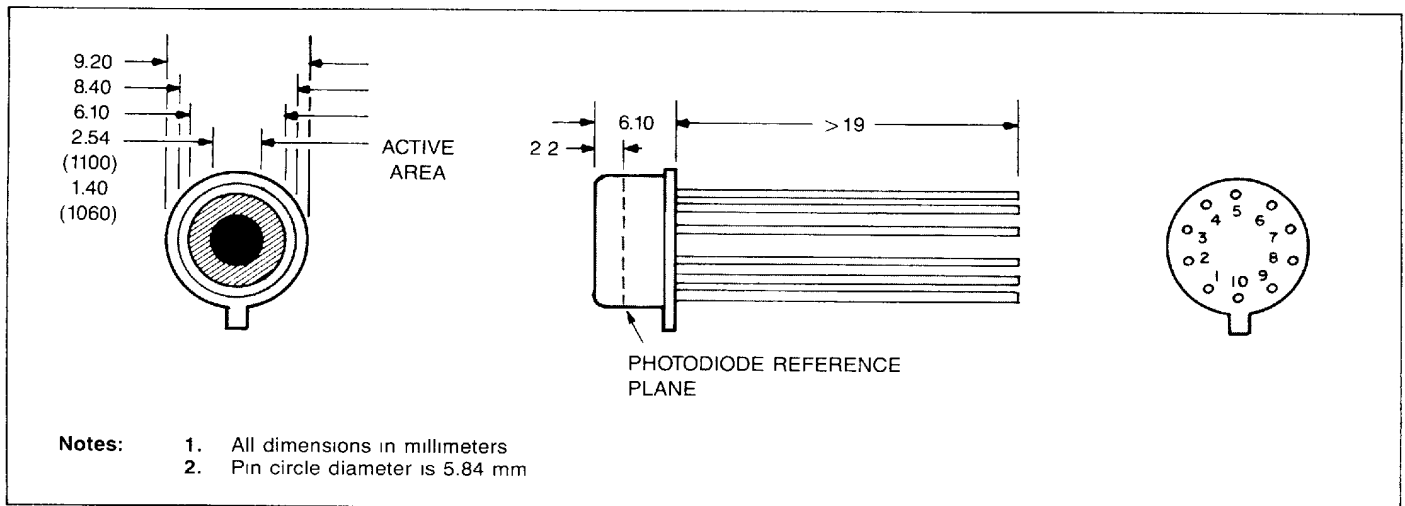
1. Gain bandwidth product. 2. Doubles every -10 °C. 3. Adjustable to 0 volts with external trimming circuit.

Typical Spectral Response

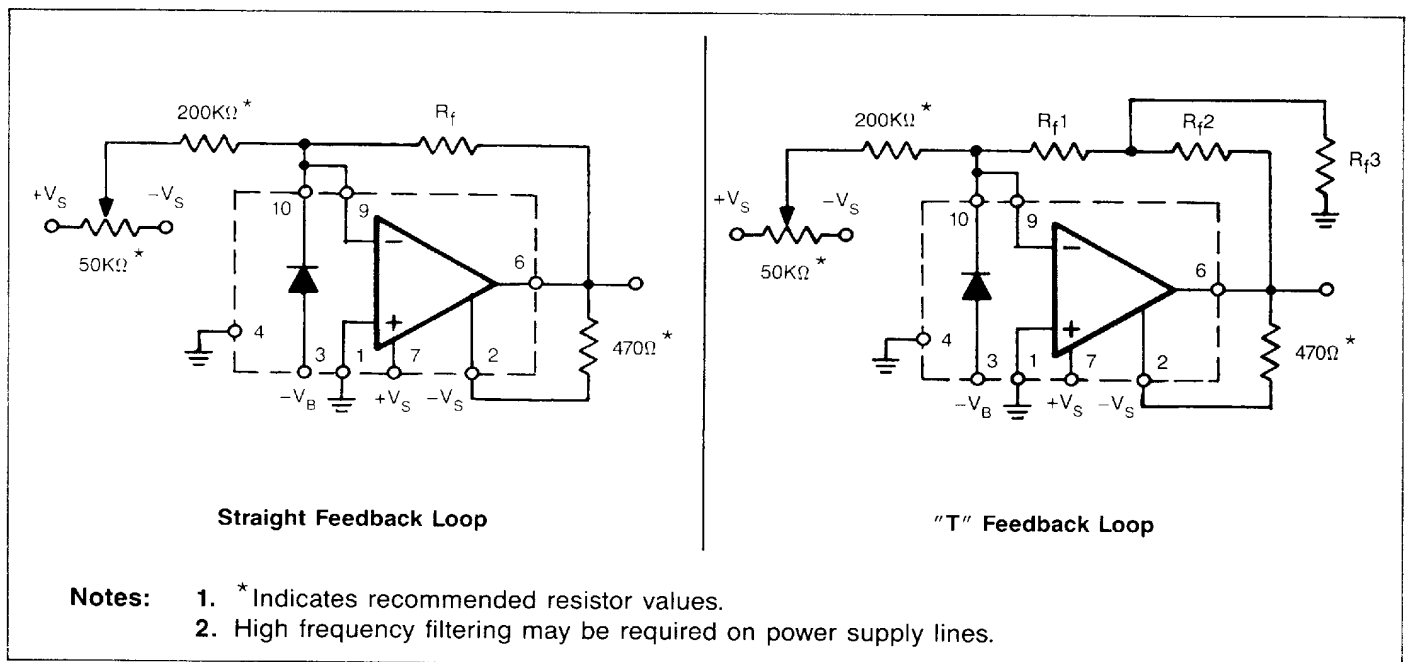


Ultra-Fast Photodiode/OP-AMP

Mechanical Data



Electrical Data



Pin Assignments

1	Signal Ground (+In)	6	Output
2	-V Supply	7	+V Supply
3	-V Bias (Anode)	8	Not Connected
4	Case Ground	9	Inverting Input (-In)
5	Not Connected	10	Cathode



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