

# Bill of Materials

**TI DESIGNS**

TIPD176: 1 MHz, Single- Supply, Photodiode Amplifier Reference Design

Item	Quantity	Value	Designator	Description	Manufacturer	Part Number	Supplier Part Number
1	1	2.7pF	C1	CAP, CERM, 2.7pF, 50V, +/-9%, C0G/NP0, 0603	AVX	06035A2R7CAT2A	478-1156-1-ND
2	1	1uF	C2	CAP, CERM, 1uF, 16V, +/-10%, X5R, 0603	Kemet	C0603C105K4PACTU	399-5090-1-ND
3	1	0.1uF	C3	CAP, CERM, 0.1uF, 16V, +/-5%, X7R, 0603	AVX	0603YC104JAT2A	478-3726-1-ND
4	1	10uF	C4	CAP, CERM, 10uF, 10V, +/-10%, X5R, 1210	Kemet	C1210C106K8PACTU	C1210C106K8PACTU
5	2		J1, J3	Standard Banana Jack, Uninsulated, 5.5mm	Keystone	575-4	575-4K-ND
6	1		J2	Header, 100mil, 2x1, Gold, TH	TE Connectivity	5-146261-1	
7	1		J4	Connector, SMT, End launch SMA 50 ohm	Emerson Network Power	142-0701-851	J658-ND
8	1		PD1	Silicon PIN Photodiode	Osram	SFH213	475-1077-ND
9	1	53.6k	R1	RES, 53.6k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060353K6FKEA	541-53.6KHCT-ND
10	1	13.7k	R2	RES, 13.7k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060313K7FKEA	541-13.7KHCT-ND
11	1	280	R3	RES, 280 ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW0603280RFKEA	541-280HCT-ND
12	1	49.9	R4	RES, 49.9 ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060349R9FKEA	541-49.9HCT-ND
13	1		U1	Precision, 20 MHz, 0.9 pA Ib, RRIO, CMOS Operational Amplifier, 1.8 to 5.5 V, -40 to 125 degC, 5-pin SOT23 (DBV0005A), Green (RoHS & no Sb/Br)	Texas Instruments	OPA320AIDBVR	296-29480-2-ND

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