

# Bill of Materials

**TI DESIGNS**

TIPD102: High-Side V-I Converter, 0 to 2 V Input, 0 mA to 100 mA Output, 1% Accurate Reference Design

Item #	Quantity	Value	Designator	Description	Manufacturer	Part Number	Supplier Part Number 1
1	1	10uF	C1	CAP, TANT, 10uF, 50V, +/-10%, 0.4 ohm, 7343-43 SMD	AVX	TPSE106K050R0400	478-3361-1-ND
2	2	0.1uF	C2, C3	CAP, CERM, 0.1uF, 100V, +/-10%, X7R, 0603	MuRata	GRM188R72A104KA35D	490-3285-1-ND
3	1	100pF	C4	CAP, CERM, 100pF, 100V, +/-5%, COG/NP0, 0603	TDK	C1608C0G2A101J	445-2306-1-ND
4	1	10pF	C5	CAP, CERM, 10pF, 50V, +/-5%, COG/NP0, 0603	AVX	06035A100JAT2A	478-1163-1-ND
5	1	1000pF	C6	CAP, CERM, 1000pF, 100V, +/-5%, X7R, 0603	AVX	06031C102JAT2A	478-3698-1-ND
6	1	2200pF	C7	CAP, CERM, 2200pF, 50V, +/-5%, COG/NP0, 0603	TDK	C1608C0G1H222J	445-1297-1-ND
7	4		F1, F2, F3, F4	BUMPON CYLINDRICAL .312X.200 BLK	3M	SJ61A1	SJ5746-0-ND
8	2		GND, Vcc	Standard Banana Jack, Uninsulated, 5.5mm	Keystone	575-4	575-4K-ND
9	2		J1, J2	CONN HEADER 2POS .100" SNGL SMD	Samtec	TSM-102-01-T-SV	TSM-102-01-T-SV-ND
10	1		Q1	MOSFET, N-CH, 30V, 4.5A, SOT-23	NXP Semiconductors	SI2304DS,215	568-5957-1-ND
11	1		Q2	MOSFET P-CH 60V 1.7A SOT-223	ON Semi	NTF2955T1G	NTF2955T1GOSCT-ND
12	1	10.0k	R1	RES, 10.0k ohm, 0.1%, 0.1W, 0603	Susumu Co Ltd	RG1608P-103-B-T5	RG16P10.0KBCT-ND
13	2	10.0k	R2, R4	RES, 10.0k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060310K0FKEA	541-10.0KHCT-ND
14	1	200	R3	RES, 200 ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW0603200RFKEA	541-200HCT-ND
15	1	330	R5	RES, 330 ohm, 1%, 0.1W, 0603	Yageo America	RC0603FR-07330RL	311-330HRCT-ND
16	1	2.00k	Rc	RES, 2.00k ohm, 0.1%, 0.1W, 0603	Susumu Co Ltd	RG1608P-202-B-T5	RG16P2.0KBCT-ND
17	1		Rload	Conn Term Block, 2POS, 5.08mm PCB	Phoenix Contact	1715721	277-1263-ND
18	1	470	Rs1+	RES 470 OHM 1/6W 0.1% 0603 SMD	Susumu	RGH1608-2C-P-471-B	RGH16P470CT-ND
19	1	4.7	Rs2+	RES 4.70 OHM 1/16W 0.1% 0603	TE Connectivity	8-1614882-3	A103106CT-ND
20	2	Red	TP1, TP8	Test Point, TH, Miniature, Red	Keystone	5000	5000K-ND
21	6	Black	TP2, TP3, TP4, TP5, TP6, TP7	Test Point, TH, Miniature, Black	Keystone	5001	5001K-ND
22	6	White	TP9, TP10, TP11, TP12, TP13, TP14	Test Point, TH, Miniature, White	Keystone	5002	5002K-ND
23	1	OPA2333	U1	IC OPAMP CHOP R-R 350KHZ 8MSOP	Texas Instruments	OPA2333AIDGKR	296-22883-2-ND
24	1		Vin	Connector, TH, SMA	Emerson Network Power	142-0701-201	J500-ND

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