

Bill of Materials

TI DESIGNS

TIPD101: Low-Side V-I Converter Reference Design, 0 to 5 V Input, 0 mA to 500 mA Output, 1% Error

Line #	Quantity	Value	Designator	Description	Manufacturer	PartNumber	Supplier Part Number 1
1	1	10uF	C1	CAP, TANT, 10uF, 25V, +/-10%, 0.5V	AVX	TPSC106K025R0300	478-3360-1-ND
2	1	0.1uF	C2	CAP, CERM, 0.1uF, 25V, +/-10%, 0.5V	MuRata	GRM21BR71E104KA01L	490-1673-1-ND
3	2	100pF	C3, C5	CAP, CERM, 100pF, 50V, +/-5%, 0.5V	Kemet	C0805C101J5GACTU	399-1122-1-ND
4	1	0.1uF	C4	CAP, CERM, 0.1uF, 50V, +/-5%, 0.5V	AVX	08055C104JAT2A	478-3352-1-ND
5	1		J1	Standard Banana Jack, Uninsulated	Keystone	575-4	575-4K-ND
6	1		J2	Standard Banana Jack, Uninsulated	Keystone	575-4	575-4K-ND
7	1		J3	Connector, TH, SMA	Emerson Network Power	142-0701-201	J500-ND
8	1		J4	Conn Term Block, 2POS, 3.81mm	Phoenix Contact	1727010	277-1947-ND
9	1		Q1	TRANS NPN 10A 100V HI PWR TIP33CG	ON Semiconductor	TIP33CGOS-ND	TIP33CG
10	1	20R	R1	RES, 20.0 ohm, 0.5%, 0.1W, 0805	Susumu Co Ltd	RR1220Q-200-D	RR12Q20DCT-ND
11	1	47.0k	R2	RES, 47.0k ohm, 0.1%, 0.125W, 0805	Susumu Co Ltd	RG2012P-473-B-T5	RG20P47KBCT-ND
12	1	2.00k	R3	RES, 2.00k ohm, 0.1%, 0.125W, 0805	Susumu Co Ltd	RG2012P-202-B-T5	RG20P2.0KBCT-ND
13	1	1.00k	R4	RES, 1.00k ohm, 0.1%, 0.125W, 0805	Susumu Co Ltd	RG2012P-102-B-T5	RG20P1.0KBCT-ND
14	1	10.0k	R5	RES, 10.0k ohm, 1%, 0.125W, 0805	Vishay-Dale	CRCW080510K0FKEA	541-10.0KCCT-ND
15	1	0.2	R6	RES 0.2 OHM 1/4W 1% 0805 SMD	Stackpole	CSR0805FKR200	CSR0805FKR200CT-ND
16	2	Red	TP1, TP9	Test Point, TH, Miniature, Red	Keystone	5000	5000K-ND
17	6	Black	TP2, TP3, TP4, TP5, TP6, TP7	Test Point, TH, Miniature, Black	Keystone	5001	5001K-ND
18	4	White	TP8, TP10, TP11, TP12	Test Point, TH, Miniature, White	Keystone	5002	5002K-ND
19	1		U1	IC OPAMP CHOP R-R 1.6MHZ 8-PIN	Texas Instruments	OPA735AID	296-17995-ND

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