

Bill of Materials

TI DESIGNS

TIPD158: Low Cost Loop-Powered 4-20mA Transmitter, EMC/EMI Tested

Item	Quantity	Designator	Description	Manufacturer	PartNumber
0	1	C1	CAP CER 2.2UF 10V Y5V 0603	Yageo	CC0603ZRY5V6BB225
1	2	C2, C3	CAP CER 0.1UF 100V 10% X7R 0603	Yageo	CC0603KRX7R0BB104
2	1	C4	CAP CER 10000PF 100V X7R 0603	TDK	C1608X7R2A103K080AA
3	1	D1	TVS DIODE 36VWM 60VC SOD323	Bourns Inc	CDSOD323-T36SC
4	1	D2	Diode, Switching-Bridge, 1000V, 1A, 5.0x1.21x6.2mm	Diodes Inc.	DSRHD10-13
5	2	FB1, FB2	3A Ferrite Bead, 600 ohm @ 100MHz, SMD	Taiyo Yuden	FBMH3225HM601NT
6	1	J1	Terminal Block, 6A, 3.5mm Pitch, 2-Pos, TH	On-Shore Technology	ED555/2DS
7	1	J2	Receptacle, 50mil 10x1, R/A, TH	Mill-Max	851-43-010-20-001000
8	1	Q1	Transistor, NPN, 45V, 1A, SOT-89	Diodes Inc.	FCX690BTA
9	1	R1	RES 7.87K OHM 1/4W 1% 1206 SMD	Yageo	RC1206FR-077K87L
10	1	R2A	RES 30.1K OHM 1/10W .1% 0603 SMD	Panasonic	ERA-3AEB3012V
11	1	R2B	RES 442 OHM 1/10W .1% 0603 SMD	Panasonic	ERA-3AEB4420V
12	1	R3	RES 4.32K OHM 1/10W .1% 0603 SMD	Panasonic	ERA-3AEB4321V
13	1	R4	RES 26.7 OHM 1/4W 0.1% 0805	TE Connectivity	6-1625868-8
14	1	R5A	RES 120K OHM 1/10W .1% 0603 SMD	Panasonic	ERA-3AEB124V
15	1	R5B	RES 2.15K OHM 1/10W .1% 0603 SMD	Panasonic	ERA-3AEB2151V
16	1	R6	RES 60.4 OHM 1/10W 1% 0603 SMD	Vishay-Dale	CRCW060360R4FKEA
17	1	R7	RES, 10.0k ohm, 1%, 0.063W, 0402	Vishay-Dale	CRCW040210K0FKED
18	1	R8	RES 4.87K OHM 1/10W .1% 0603 SMD	Panasonic	ERA-3AEB4871V
19	1	R9	RES 24K OHM 1/10W .1% 0603 SMD	Panasonic	ERA-3AEB243V
20	1	U1	2.0V to 5.5V, 80µA, 12-Bit, Low-Power, Single-Channel, Digital-to-Analog Converters in SC70 Package, DCK0006A	Texas Instruments	DAC7311IDCK
21	1	U2	Low-Offset, Rail-to-Rail I/O Operational Amplifier, DBV0005A	Texas Instruments	OPA317IDBV
22	1	U3	PRECISION PROGRAMMABLE REFERENCE, DBZ0003A	Texas Instruments	TL431BQDBZ

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