

Bill of Materials

TI DESIGNS

TIPD190: 2-wire 4-20mA Transmitter, EMC/EMI Tested

Item	Designator	Quantity	Value	Description	Manufacturer	Part Number
1	C1	1	2.2uF	CAP, CERM, 2.2 μ F, 10 V, +/- 10%, X7R, 0603	MuRata	GRM188R71A225KE15D
2	C2, C5	2	0.1uF	CAP, CERM, 0.1 μ F, 100 V, +/- 10%, X7R, 0603	MuRata	GRM188R72A104KA35D
3	C3	1	100pF	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603	MuRata	GRM1885C1H101JA01D
4	C4	1	0.01uF	CAP, CERM, 0.01 μ F, 100 V, +/- 10%, X7R, 0603	MuRata	GRM188R72A103KA01D
5	D1	1	40V	TVS DIODE 36VWM 60VC SOD323	Bourns Inc	CDSOD323-T36SC
6	D2	1	1000V	Diode, Switching-Bridge, 1000V, 1A, 5.0x1.21x6.2mm	Diodes Inc.	DSRHD10-13
7	J1	1		Terminal Block, 6A, 3.5mm Pitch, 2-Pos, TH	On-Shore Technology	ED555/2DS
8	J2	1		Receptacle, 50mil 10x1, R/A, TH	Mill-Max	851-43-010-20-001000
9	L1, L2	2	2000 ohm	Ferrite Bead, 2000 ohm @ 100 MHz, 1.2 A, 1210 (H=2.5mm)	Taiyo Yuden	FBMH3225HM202NT
10	Q1	1	0.08V	Transistor, NPN, 45V, 1A, SOT-89	Diodes Inc.	FCX690BTA
11	R1	1	100k	RES, 100 k, 0.1%, 0.1 W, 0603	Panasonic	ERA-3AEB104V
12	R2	1	49.9	RES, 49.9, 1%, 0.1 W, 0603	Vishay-Dale	CRCW060349R9FKEA
13	R3	1	2.40k	RES, 2.40 k, 0.1%, 0.1 W, 0603	Panasonic	ERA-3AEB242V
14	R4	1	100	RES, 100, 0.1%, 0.1 W, 0603	Panasonic	ERA-3AEB101V
15	R5	1	25.5k	RES, 25.5 k, 0.1%, 0.1 W, 0603	Panasonic	ERA-3AEB2552V
16	U1	1		4-20mA CURRENT LOOP TRANSMITTERS, D0008A	Texas Instruments	XTR116U/2K5
17	U2	1		16-BIT, ULTRA-LOW GLITCH, VOLTAGE OUTPUT DIGITAL-TO-ANALOG CONVERTER, DGK0008A	Texas Instruments	DAC8551IDGKR

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