



**FLZ Series 0.5mm FFC/FPC Connectors**



**A**

This extremely small 0.5mm (.020") pitch connector with a height of only 2.0mm (.079") above the PCB surface allows interconnection in extremely small spaces and is an example of JST's leading edge technology. **Features:** • Zero insertion force mechanism increases wear resistance and extends the connector's mating life • Heat resistant design suitable for surface mounting to allow for reflow soldering • In-line surface mount tails for easy inspection • Two types of connections:

normal or reverse configurations; the FFC/FPC is positioned with its mating surfaces facing upward for the normal configured connector, while the reverse configuration requires that the FFC/FPC be positioned with its mating surfaces facing down giving the engineer greater freedom in designing the circuitry. **Specifications:** • Current Rating: 0.5A AC/DC • Voltage Rating: 50V AC/DC • Temperature Range: -25°C - 85°C • Withstanding Voltage: 200V AC/minute

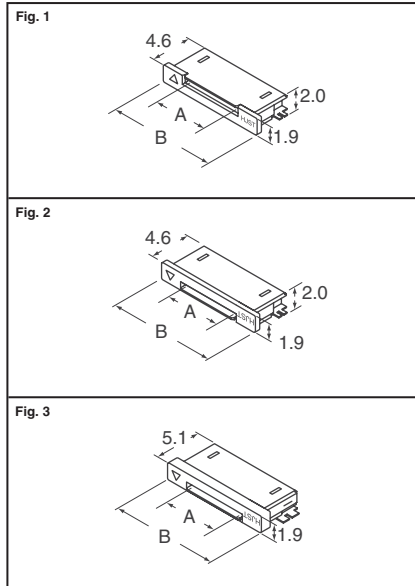


Fig.	Circuits	Dimensions (mm)			Digi-Key Part No.	Cut Tape Pricing			Tape & Reel† Pricing 2,000	JST Part No.
		A	B			1	10	100		
<b>Normal Type</b>										
1	6	2.5	8.9		455-1960-1-ND	.72	6.64	55.30	367.14/M	06FLZ-SM2-TB(LF)(SN)
	8	3.5	9.9		455-1964-1-ND	.77	7.10	59.12	392.53/M	08FLZ-SM2-TB(LF)(SN)
	9	4.0	10.4		455-1966-1-ND	.89	8.22	68.44	454.47/M	09FLZ-SM2-TB(LF)(SN)
	12	5.5	11.9		455-1968-1-ND	.97	8.97	74.73	496.23/M	12FLZ-SM2-TB(LF)(SN)
	14	6.5	12.9		455-1970-1-ND	1.00	9.27	77.30	513.30/M	14FLZ-SM2-TB(LF)(SN)
	16	7.5	13.9		455-1972-1-ND	1.09	10.04	83.70	555.74/M	16FLZ-SM2-TB(LF)(SN)
	20	9.5	15.9		455-1974-1-ND	1.15	10.55	87.93	583.83/M	20FLZ-SM2-TB(LF)(SN)(P)
	24	11.5	17.9		455-1977-1-ND	1.31	12.16	101.30	672.65/M	24FLZ-SM2-TB(LF)(SN)
	27	13.0	19.4		455-1981-1-ND	1.39	12.84	107.02	710.60/M	27FLZ-SM2-TB(LF)(SN)
	28	13.5	19.9		455-1983-1-ND	1.40	12.93	107.76	715.51/M	28FLZ-SM2-TB(LF)(SN)
<b>Reverse Type</b>										
2	6	2.5	8.9		455-1959-1-ND	.71	6.61	55.03	365.41/M	06FLZ-RSM2-TB(LF)(SN)(P)
	7	3.0	9.4		455-1961-1-ND	.74	6.77	56.44	374.74/M	07FLZ-RSM2-TB(LF)(SN)
	8	3.5	9.9		455-1963-1-ND	.76	7.05	58.75	390.09/M	08FLZ-RSM2-TB(LF)(SN)
	12	5.5	11.9		455-1967-1-ND	.97	8.91	74.27	493.10/M	12FLZ-RSM2-TB(LF)(SN)
	14	6.5	12.9		455-1969-1-ND	1.00	9.27	77.30	513.30/M	14FLZ-RSM2-TB(LF)(SN)
	16	7.5	13.9		455-1971-1-ND	1.07	9.86	82.16	545.54/M	16FLZ-RSM2-TB(LF)(SN)
	20	9.5	15.9		455-1973-1-ND	1.13	10.43	86.86	576.75/M	20FLZ-RSM2-TB(LF)(SN)
	22	10.5	16.9		455-1975-1-ND	1.19	10.99	91.56	607.96/M	22FLZ-RSM2-TB(LF)(SN)
	24	11.5	17.9		455-1976-1-ND	1.23	11.42	95.13	631.66/M	24FLZ-RSM2-TB(LF)(SN)
	26	12.5	18.9		455-1978-1-ND	1.36	12.56	104.61	694.59/M	26FLZ-RSM2-TB(LF)(SN)
	27	13.0	19.4		455-1980-1-ND	1.39	12.77	106.44	706.75/M	27FLZ-RSM2-TB(LF)(SN)
	28	13.5	19.9		455-1982-1-ND	1.39	12.87	107.23	711.99/M	28FLZ-RSM2-TB(LF)(SN)(P)
	30	14.5	20.9		455-1984-1-ND	1.47	13.64	113.62	754.44/M	30FLZ-RSM2-TB(LF)(SN)
	<b>Inner-Lock Reverse Type</b>									
3	34	16.5	23.6		455-1987-1-ND	1.67	15.47	128.92	856.04/M	34FLZ-RSM2-R-TB(LF)(SN)
	40	19.5	26.6		455-1988-1-ND	1.85	17.06	142.13	943.75/M	40FLZ-RSM2-R-TB(LF)(SN)

† For Tape and Reel part number, change 1-ND to 2-ND.

**FMN Series 1.0mm FFC/FPC Connectors**



**Features:** • Height: 3.0mm (.118") side-entry type; 5.1mm (.201") top-entry type • There are no slides or levers to operate on the reduced insertion force connector. It requires 1/2 the insertion force of JST's conventional FFC connector, but retains stable contact performance when subjected to environmental and mechanical stresses. • SMT type connectors

have heat-resistant housings so solder reflow is possible. They also have solder tabs for extra strength. **Specifications:** • Current Rating: 0.5A DC • Voltage Rating: 50V DC • Temperature Range: -25°C - 85°C • Applicable PC Board Thickness: 1.6mm (.063")

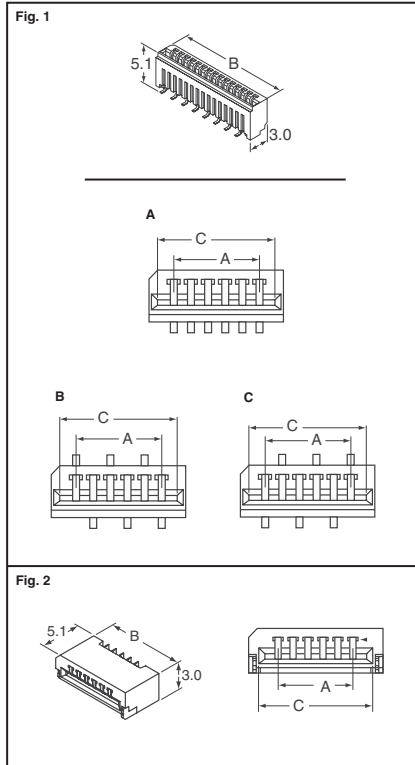


Fig.	Circuits	Dimensions (mm)			Digi-Key Part No.	Cut Tape Pricing			Tape and Reel† Pricing Qty.	JST Part No.	
		A	B	C		1	10	100			
<b>Top Entry — Single Row</b>											
1A	4	3.0	6.0	5.0	455-2194-1-ND	.33	2.99	24.97	1,000	165.78	04FMN-BMT-A-TF(LF)(SN)
	8	7.0	10.0	9.0	455-1925-1-ND	.44	4.05	33.78	1,000	224.26	08FMN-BMT-A-TF(LF)(SN)
	10	9.0	12.0	11.0	455-1930-1-ND	.49	4.52	37.69	1,000	250.28	10FMN-BMT-A-TF(LF)(SN)
	12	11.0	14.0	13.0	455-1935-1-ND	.55	5.13	42.72	1,000	283.68	12FMN-BMT-A-TF(LF)(SN)
	18	17.0	20.0	19.0	455-1946-1-ND	.72	6.69	55.70	1,000	369.79	18FMN-BMT-A-TF(LF)(SN)
	22	21.0	24.0	23.0	455-1952-1-ND	.87	8.09	67.40	1,000	447.52	22FMN-BMT-A-TF(LF)(SN)
	30	29.0	32.0	31.0	455-1957-1-ND	1.10	10.12	84.33	1,000	559.95	30FMN-BMT-A-TF(LF)(SN)
<b>Top Entry — Staggered</b>											
1B	4	3.0	6.0	5.0	455-1918-1-ND	.33	2.99	24.97	1,000	165.78	04FMN-BMTTN-A-TF(LF)(SN)
	5	4.0	7.0	6.0	455-1920-1-ND	.35	3.24	26.95	1,000	178.95	05FMN-BMTTN-A-TF(LF)(SN)
	6	5.0	8.0	7.0	455-1922-1-ND	.38	3.47	28.88	1,000	191.79	06FMN-BMTTN-A-TF(LF)(SN)
	9	8.0	11.0	10.0	455-1928-1-ND	.46	4.28	35.71	1,000	237.10	09FMN-BMTTN-A-TF(LF)(SN)
	10	9.0	12.0	11.0	455-1932-1-ND	.49	4.52	37.69	1,000	250.28	10FMN-BMTTN-A-TF(LF)(SN)
	13	12.0	15.0	14.0	455-1938-1-ND	.58	5.33	44.44	1,000	295.09	13FMN-BMTTN-A-TF(LF)(SN)
1C	25	24.0	27.0	26.0	455-1954-1-ND	.97	8.94	74.47	1,000	494.43	25FMN-BMTTN-A-TF(LF)(SN)
	12	11.0	14.0	13.0	455-1936-1-ND	.55	5.13	42.72	1,000	283.68	12FMN-BMTTR-A-TB(LF)(SN)
1C	14	13.0	16.0	15.0	455-1941-1-ND	.60	5.54	46.16	1,000	306.49	14FMN-BMTTR-A-TB(LF)(SN)
	16	15.0	18.0	17.0	455-1944-1-ND	.67	6.21	51.72	2,000	343.43/M	16FMN-BMTTR-A-TB(LF)(SN)
	20	19.0	22.0	21.0	455-1950-1-ND	.79	7.35	61.25	1,000	406.73	20FMN-BMTTR-A-TB(LF)(SN)
<b>Side Entry</b>											
2	4	3.0	7.0	5.0	455-1919-1-ND	.33	2.99	24.97	2,000	165.78/M	04FMN-SMT-A-TF(LF)(SN)
	6	5.0	9.0	7.0	455-1923-1-ND	.38	3.47	28.88	2,000	191.80/M	06FMN-SMT-A-TF(LF)(SN)
	7	6.0	10.0	8.0	455-1924-1-ND	.40	3.71	30.87	2,000	204.98/M	07FMN-SMT-A-TF(LF)(SN)
	8	7.0	11.0	9.0	455-1927-1-ND	.44	4.05	33.78	2,000	224.26/M	08FMN-SMT-A-TF(LF)(SN)
	10	9.0	13.0	11.0	455-1934-1-ND	.49	4.52	37.69	2,000	250.29/M	10FMN-SMT-A-TF(LF)(SN)
	12	11.0	15.0	13.0	455-1937-1-ND	.55	5.13	42.72	2,000	283.68/M	12FMN-SMT-A-TF(LF)(SN)
	13	12.0	16.0	14.0	455-1939-1-ND	.58	5.33	44.44	2,000	236.43/M	13FMN-SMT-A-TF(LF)(SN)
	14	13.0	17.0	15.0	455-1942-1-ND	.60	5.54	46.16	2,000	306.49/M	14FMN-SMT-A-TF(LF)(SN)
	16	15.0	19.0	17.0	455-1945-1-ND	.67	6.21	51.72	2,000	343.43/M	16FMN-SMT-A-TF(LF)(SN)
	20	19.0	23.0	21.0	455-1951-1-ND	.79	7.35	61.25	2,000	406.74/M	20FMN-SMT-A-TF(LF)(SN)
	28	27.0	31.0	29.0	455-1956-1-ND	1.05	9.69	80.78	2,000	536.36/M	28FMN-SMT-A-TF(LF)(SN)

† For Tape and Reel part number, change 1-ND to 2-ND.

Digi-Reel® Most SMT cutdown parts are available on a Digi-Reel®. For Digi-Reel part number, change 1-ND to 6-ND or CT-ND to DKR-ND. See Digi-Key® Services on page 2 for additional information.