



**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 connectors:

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

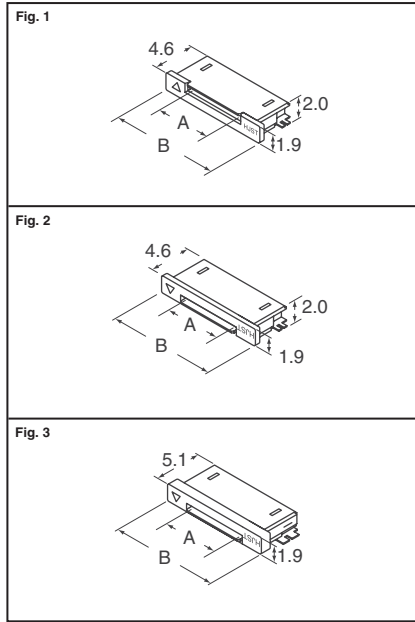


Fig.	Circuits	Dimensions - (mm)		Digi-Key Part No.	Cut Tape Pricing			Tape & Reel† Pricing 2,000	JST Part No.
		A	B		10	100	500		
<b>Normal Type</b>									
1	6	2.5	8.9	455-1960-1-ND	7.82	65.14	260.55	432.52/M	06FLZ-SM2-TB(LF)(SN)
	7	3.0	9.4	455-1962-1-ND	8.08	67.36	269.43	447.26/M	07FLZ-SM2-TB(LF)(SN)
	8	3.5	9.9	455-1964-1-ND	8.36	69.64	278.57	462.43/M	08FLZ-SM2-TB(LF)(SN)
	9	4.0	10.4	455-1966-1-ND	9.68	80.63	322.53	535.40/M	09FLZ-SM2-TB(LF)(SN)
	12	5.5	11.9	455-1968-1-ND	10.56	88.04	352.16	584.59/M	12FLZ-SM2-TB(LF)(SN)
	14	6.5	12.9	455-1970-1-ND	10.98	91.50	366.00	607.56/M	14FLZ-SM2-TB(LF)(SN)
	16	7.5	13.9	455-1972-1-ND	11.83	98.60	394.40	654.71/M	16FLZ-SM2-TB(LF)(SN)
	20	9.5	15.9	455-1974-1-ND	12.43	103.58	414.33	687.79/M	20FLZ-SM2-TB(LF)(SN)
	24	11.5	17.9	455-1977-1-ND	14.32	119.34	477.37	792.44/M	24FLZ-SM2-TB(LF)(SN)
	26	12.5	18.9	455-1979-1-ND	14.87	123.91	495.65	822.78/M	26FLZ-SM2-TB(LF)(SN)
	27	13.0	19.4	455-1981-1-ND	15.13	126.07	504.29	837.12/M	27FLZ-SM2-TB(LF)(SN)
	28	13.5	19.9	455-1983-1-ND	15.23	126.95	507.78	842.92/M	28FLZ-SM2-TB(LF)(SN)
33	16.0	22.4	455-1986-1-ND	16.68	138.96	555.84	922.70/M	33FLZ-SM2-TB(LF)(SN)	
<b>Reverse Type</b>									
2	6	2.5	8.9	455-1959-1-ND	7.78	64.83	259.32	430.47/M	06FLZ-RSM2-TB(LF)(SN)
	7	3.0	9.4	455-1961-1-ND	7.98	66.49	265.94	441.46/M	07FLZ-RSM2-TB(LF)(SN)
	8	3.5	9.9	455-1963-1-ND	8.31	69.21	276.84	459.56/M	08FLZ-RSM2-TB(LF)(SN)
	9	4.0	10.4	455-1965-1-ND	9.64	80.30	321.18	533.16/M	09FLZ-RSM2-TB(LF)(SN)
	12	5.5	11.9	455-1967-1-ND	10.50	87.49	349.94	580.90/M	12FLZ-RSM2-TB(LF)(SN)
	14	6.5	12.9	455-1969-1-ND	10.93	91.07	364.27	604.69/M	14FLZ-RSM2-TB(LF)(SN)
	16	7.5	13.9	455-1971-1-ND	11.61	96.79	387.16	642.69/M	16FLZ-RSM2-TB(LF)(SN)
	20	9.5	15.9	455-1973-1-ND	12.28	102.33	409.30	679.44/M	20FLZ-RSM2-TB(LF)(SN)
	22	10.5	16.9	455-1975-1-ND	12.94	107.86	431.45	716.21/M	22FLZ-RSM2-TB(LF)(SN)
	24	11.5	17.9	455-1976-1-ND	14.26	118.79	475.17	788.78/M	24FLZ-RSM2-TB(LF)(SN)
	26	12.5	18.9	455-1978-1-ND	14.79	123.23	492.93	818.27/M	26FLZ-RSM2-TB(LF)(SN)
	27	13.0	19.4	455-1980-1-ND	15.05	125.39	501.57	832.61/M	27FLZ-RSM2-TB(LF)(SN)
28	13.5	19.9	455-1982-1-ND	15.16	126.32	505.28	838.77/M	28FLZ-RSM2-TB(LF)(SN)	
30	14.5	20.9	455-1984-1-ND	16.06	133.85	535.41	888.78/M	30FLZ-RSM2-TB(LF)(SN)	
<b>Inner-Lock Reverse Type</b>									
3	34	16.5	23.6	455-1987-1-ND	18.23	151.88	607.51	1008.47/M	34FLZ-RSM2-R-TB(LF)(SN)
	40	19.5	26.6	455-1988-1-ND	20.09	167.44	669.75	1111.79/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)

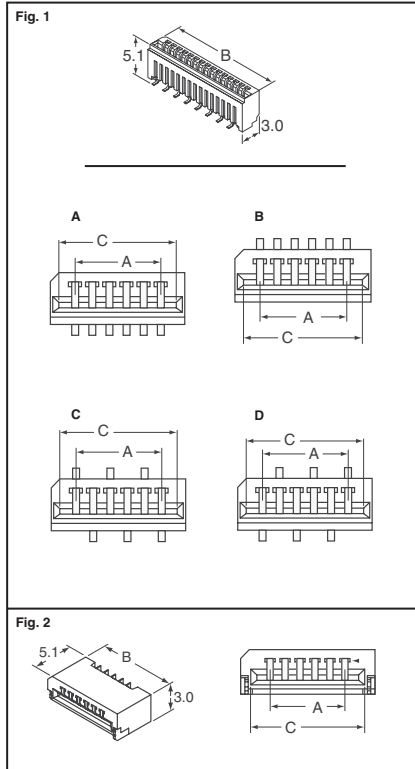


Fig.	Circuits	Dimensions (mm)			Digi-Key Part No.	Cut Tape Pricing			Tape & Reel† Pricing 2,000	JST Part No.	
		A	B	C		10	100	500			
<b>Top Entry — Single Row</b>											
1A	4	3.0	6.0	5.0	455-2194-1-ND	3.53	29.41	117.65	1,000	195.30	04FMN-BMT-A-TF(LF)(SN)
	8	7.0	10.0	9.0	455-1925-1-ND	4.77	39.79	159.15	1,000	264.19	08FMN-BMT-A-TF(LF)(SN)
	10	9.0	12.0	11.0	455-1930-1-ND	5.33	44.41	177.62	1,000	294.85	10FMN-BMT-A-TF(LF)(SN)
	12	11.0	14.0	13.0	455-1935-1-ND	6.04	50.33	201.32	1,000	334.19	12FMN-BMT-A-TF(LF)(SN)
	18	17.0	20.0	19.0	455-1946-1-ND	7.87	65.61	262.43	1,000	435.63	18FMN-BMT-A-TF(LF)(SN)
	22	21.0	24.0	23.0	455-1952-1-ND	9.53	79.40	317.59	1,000	527.20	22FMN-BMT-A-TF(LF)(SN)
	30	29.0	32.0	31.0	455-1957-1-ND	11.92	99.35	397.39	1,000	659.67	30FMN-BMT-A-TF(LF)(SN)
<b>Top Entry — Single Row (Reverse)</b>											
1B	10	9.0	12.0	11.0	455-1931-1-ND	5.33	44.41	177.62	1,000	294.85	10FMN-BMTR-A-TB(LF)(SN)
	18	17.0	20.0	19.0	455-1947-1-ND	7.87	65.61	262.43	1,000	435.63	18FMN-BMTR-A-TB(LF)(SN)
<b>Top Entry — Staggered</b>											
1C	4	3.0	6.0	5.0	455-1918-1-ND	3.53	29.41	117.65	1,000	195.30	04FMN-BMTTN-A-TF(LF)(SN)
	5	4.0	7.0	6.0	455-1920-1-ND	3.81	31.75	127.00	1,000	210.82	05FMN-BMTTN-A-TF(LF)(SN)
	6	5.0	8.0	7.0	455-1922-1-ND	4.08	34.03	136.11	1,000	225.94	06FMN-BMTTN-A-TF(LF)(SN)
	8	7.0	10.0	9.0	455-1926-1-ND	4.77	39.79	159.15	1,000	264.19	08FMN-BMTTN-A-TF(LF)(SN)
	9	8.0	11.0	10.0	455-1929-1-ND	5.05	42.07	168.26	1,000	279.31	09FMN-BMTTN-A-TF(LF)(SN)
	10	9.0	12.0	11.0	455-1932-1-ND	5.33	44.41	177.62	1,000	294.85	10FMN-BMTTN-A-TF(LF)(SN)
	13	12.0	15.0	14.0	455-1938-1-ND	6.28	52.36	209.42	1,000	347.64	13FMN-BMTTN-A-TF(LF)(SN)
	14	13.0	16.0	15.0	455-1940-1-ND	6.53	54.38	217.51	1,000	361.07	14FMN-BMTTN-A-TF(LF)(SN)
	15	14.0	17.0	16.0	455-1943-1-ND	6.88	57.34	229.36	1,000	380.74	15FMN-BMTTN-A-TF(LF)(SN)
	20	19.0	22.0	21.0	455-1949-1-ND	8.66	72.16	288.65	1,000	479.16	20FMN-BMTTN-A-TF(LF)(SN)
25	24.0	27.0	26.0	455-1954-1-ND	10.03	83.55	334.18	1,000	554.74	25FMN-BMTTN-A-TF(LF)(SN)	
40	39.0	42.0	41.0	455-1958-1-ND	14.57	121.41	485.63	1,000	806.15	40FMN-BMTTN-A-TF(LF)(SN)	
<b>Top Entry — Staggered (Reverse)</b>											
1D	10	9.0	12.0	11.0	455-1933-1-ND	5.33	44.41	177.62	1,000	294.85	10FMN-BMTRT-A-TB(LF)(SN)
	12	11.0	14.0	13.0	455-1936-1-ND	6.04	50.33	201.32	1,000	334.19	12FMN-BMTRT-A-TB(LF)(SN)
	14	13.0	16.0	15.0	455-1941-1-ND	6.53	54.38	217.51	1,000	361.07	14FMN-BMTRT-A-TB(LF)(SN)
	16	15.0	18.0	17.0	455-1944-1-ND	7.31	60.93	243.73	2,000	404.59/M	16FMN-BMTRT-A-TB(LF)(SN)
	18	17.0	20.0	19.0	455-1948-1-ND	7.87	65.61	262.43	2,000	435.64/M	18FMN-BMTRT-A-TB(LF)(SN)
	20	19.0	22.0	21.0	455-1950-1-ND	8.66	72.16	288.65	1,000	479.16	20FMN-BMTRT-A-TB(LF)(SN)
<b>Side Entry</b>											
2	4	3.0	7.0	5.0	455-1919-1-ND	3.53	29.41	117.65	2,000	195.30/M	04FMN-SMT-A-TF(LF)(SN)
	5	4.0	8.0	6.0	455-1921-1-ND	3.81	31.75	127.00	2,000	210.82/M	05FMN-SMT-A-TF(LF)(SN)
	6	5.0	9.0	7.0	455-1923-1-ND	4.08	34.03	136.11	2,000	225.95/M	06FMN-SMT-A-TF(LF)(SN)
	7	6.0	10.0	8.0	455-1924-1-ND	4.36	36.37	145.47	2,000	241.48/M	07FMN-SMT-A-TF(LF)(SN)
	8	7.0	11.0	9.0	455-1927-1-ND	4.77	39.79	159.15	2,000	264.19/M	08FMN-SMT-A-TF(LF)(SN)
	9	8.0	12.0	10.0	455-1929-1-ND	5.05	42.07	168.26	2,000	279.31/M	09FMN-SMT-A-TF(LF)(SN)
	10	9.0	13.0	11.0	455-1934-1-ND	5.33	44.41	177.62	2,000	294.85/M	10FMN-SMT-A-TF(LF)(SN)
	12	11.0	15.0	13.0	455-1937-1-ND	6.04	50.33	201.32	2,000	334.19/M	12FMN-SMT-A-TF(LF)(SN)
	13	12.0	16.0	14.0	455-1939-1-ND	6.28	52.36	209.42	2,000	347.64/M	13FMN-SMT-A-TF(LF)(SN)
	14	13.0	17.0	15.0	455-1942-1-ND	6.53	54.38	217.51	2,000	361.07/M	14FMN-SMT-A-TF(LF)(SN)
	16	15.0	19.0	17.0	455-1945-1-ND	7.31	60.93	243.73	2,000	404.59/M	16FMN-SMT-A-TF(LF)(SN)
	20	19.0	23.0	21.0	455-1951-1-ND	8.66	72.16	288.65	2,000	479.16/M	20FMN-SMT-A-TF(LF)(SN)
	24	23.0	27.0	25.0	455-1953-1-ND	10.25	85.39	341.54	2,000	566.96/M	24FMN-SMT-A-TF(LF)(SN)
	26	25.0	29.0	27.0	455-1955-1-ND	10.81	90.06	360.23	2,000	597.98/M	26FMN-SMT-A-TF(LF)(SN)
28	27.0	31.0	29.0	455-1956-1-ND	11.42	95.16	380.64	2,000	631.86/M	28FMN-SMT-A-TF(LF)(SN)	

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

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