

## 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

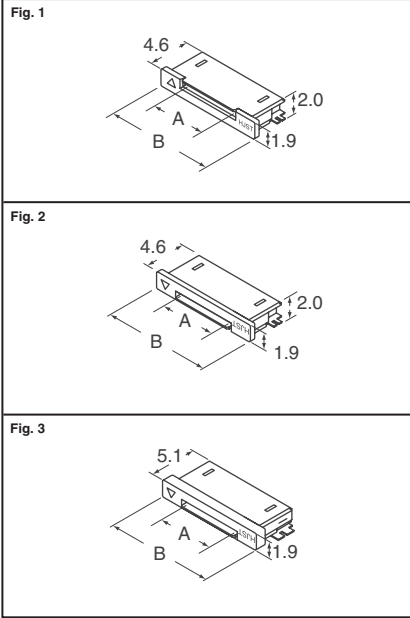


Fig.	Circuits	Dimensions - (mm)		Digi-Key Part No.	Cut Tape Pricing			Tape & Reel† Pricing 2,000	JST Part No.
		A	B		10	100	500		
<b>Normal Type</b>									
1	6	2.5	8.9	455-1960-1-ND	5.68	47.29	189.16	314.01/M	06FLZ-SM2-TB(LF)(SN)
	7	3.0	9.4	455-1962-1-ND	5.87	48.90	195.61	324.71/M	07FLZ-SM2-TB(LF)(SN)
	8	3.5	9.9	455-1964-1-ND	6.07	50.56	202.24	335.72/M	08FLZ-SM2-TB(LF)(SN)
	9	4.0	10.4	455-1966-1-ND	7.03	58.54	234.16	388.70/M	09FLZ-SM2-TB(LF)(SN)
	12	5.5	11.9	455-1968-1-ND	7.67	63.92	255.67	424.41/M	12FLZ-SM2-TB(LF)(SN)
	14	6.5	12.9	455-1970-1-ND	7.97	66.43	265.72	441.09/M	14FLZ-SM2-TB(LF)(SN)
	16	7.5	13.9	455-1972-1-ND	8.59	71.58	286.33	475.32/M	16FLZ-SM2-TB(LF)(SN)
	20	9.5	15.9	455-1974-1-ND	9.02	75.20	300.80	499.34/M	20FLZ-SM2-TB(LF)(SN)
	24	11.5	17.9	455-1977-1-ND	10.40	86.64	346.57	575.31/M	24FLZ-SM2-TB(LF)(SN)
	26	12.5	18.9	455-1979-1-ND	10.80	89.96	359.84	597.34/M	26FLZ-SM2-TB(LF)(SN)
	27	13.0	19.4	455-1981-1-ND	10.98	91.53	366.11	607.75/M	27FLZ-SM2-TB(LF)(SN)
	28	13.5	19.9	455-1983-1-ND	11.06	92.17	368.65	611.96/M	28FLZ-SM2-TB(LF)(SN)
33	16.0	22.4	455-1986-1-ND	12.11	100.88	403.54	669.88/M	33FLZ-SM2-TB(LF)(SN)	
<b>Reverse Type</b>									
2	6	2.5	8.9	455-1959-1-ND	5.65	47.07	188.27	312.52/M	06FLZ-RSM2-TB(LF)(SN)
	7	3.0	9.4	455-1961-1-ND	5.79	48.27	193.07	320.50/M	07FLZ-RSM2-TB(LF)(SN)
	8	3.5	9.9	455-1963-1-ND	6.03	50.25	200.99	333.64/M	08FLZ-RSM2-TB(LF)(SN)
	9	4.0	10.4	455-1965-1-ND	7.00	58.30	233.18	387.08/M	09FLZ-RSM2-TB(LF)(SN)
	12	5.5	11.9	455-1967-1-ND	7.62	63.52	254.06	421.74/M	12FLZ-RSM2-TB(LF)(SN)
	14	6.5	12.9	455-1969-1-ND	7.94	66.12	264.46	439.01/M	14FLZ-RSM2-TB(LF)(SN)
	16	7.5	13.9	455-1971-1-ND	8.43	70.27	281.08	466.59/M	16FLZ-RSM2-TB(LF)(SN)
	20	9.5	15.9	455-1973-1-ND	8.92	74.29	297.15	493.28/M	20FLZ-RSM2-TB(LF)(SN)
	22	10.5	16.9	455-1975-1-ND	9.39	78.31	313.23	519.97/M	22FLZ-RSM2-TB(LF)(SN)
	24	11.5	17.9	455-1976-1-ND	10.35	86.24	344.97	572.66/M	24FLZ-RSM2-TB(LF)(SN)
	26	12.5	18.9	455-1978-1-ND	10.74	89.46	357.87	594.06/M	26FLZ-RSM2-TB(LF)(SN)
	27	13.0	19.4	455-1980-1-ND	10.93	91.03	364.14	604.47/M	27FLZ-RSM2-TB(LF)(SN)
28	13.5	19.9	455-1982-1-ND	11.01	91.71	366.83	608.95/M	28FLZ-RSM2-TB(LF)(SN)	
30	14.5	20.9	455-1984-1-ND	11.66	97.18	388.71	645.26/M	30FLZ-RSM2-TB(LF)(SN)	
<b>Inner-Lock Reverse Type</b>									
3	34	16.5	23.6	455-1987-1-ND	13.23	110.26	441.05	732.15/M	34FLZ-RSM2-R-TB(LF)(SN)
	40	19.5	26.6	455-1988-1-ND	14.59	121.56	486.24	807.16/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)

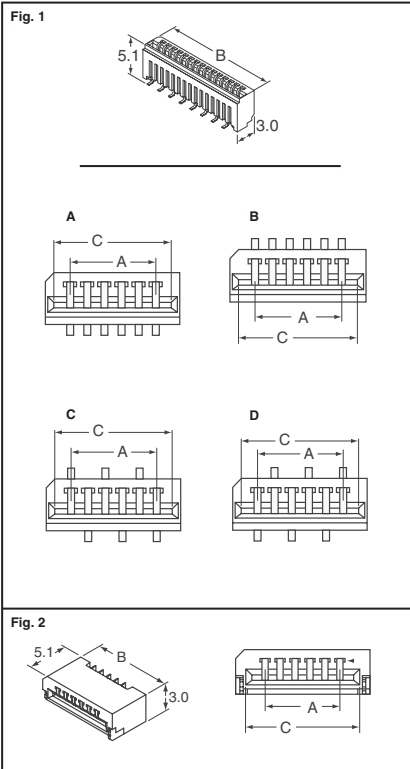


Fig.	Circuits	Dimensions (mm)			Digi-Key Part No.	Cut Tape Pricing			Tape & Reel† Pricing 2,000	JST Part No.	
		A	B	C		10	100	500			
<b>Top Entry — Single Row</b>											
1A	4	3.0	6.0	5.0	455-2194-1-ND	2.56	21.35	85.41	1,000	141.79	04FMN-BMT-A-TF(LF)(SN)
	8	7.0	10.0	9.0	455-1925-1-ND	3.46	28.89	115.54	1,000	191.80	08FMN-BMT-A-TF(LF)(SN)
	10	9.0	12.0	11.0	455-1930-1-ND	3.87	32.24	128.95	1,000	214.06	10FMN-BMT-A-TF(LF)(SN)
	12	11.0	14.0	13.0	455-1935-1-ND	4.39	36.54	146.16	1,000	242.62	12FMN-BMT-A-TF(LF)(SN)
	18	17.0	20.0	19.0	455-1946-1-ND	5.71	47.63	190.52	1,000	316.27	18FMN-BMT-A-TF(LF)(SN)
	22	21.0	24.0	23.0	455-1952-1-ND	6.92	57.64	230.57	1,000	382.75	22FMN-BMT-A-TF(LF)(SN)
30	29.0	32.0	31.0	455-1957-1-ND	8.65	72.13	288.51	1,000	478.92	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	3.87	32.24	128.95	1,000	214.06	10FMN-BMTR-A-TB(LF)(SN)
	18	17.0	20.0	19.0	455-1947-1-ND	5.71	47.63	190.52	1,000	316.27	18FMN-BMTR-A-TB(LF)(SN)
<b>Top Entry — Staggered</b>											
1C	4	3.0	6.0	5.0	455-1918-1-ND	2.56	21.35	85.41	1,000	141.79	04FMN-BMTN-A-TF(LF)(SN)
	5	4.0	7.0	6.0	455-1920-1-ND	2.77	23.05	92.20	1,000	153.06	05FMN-BMTN-A-TF(LF)(SN)
	6	5.0	8.0	7.0	455-1922-1-ND	2.96	24.71	98.82	1,000	164.04	06FMN-BMTN-A-TF(LF)(SN)
	8	7.0	10.0	9.0	455-1926-1-ND	3.46	28.89	115.54	1,000	191.80	08FMN-BMTN-A-TF(LF)(SN)
	9	8.0	11.0	10.0	455-1929-1-ND	3.67	30.54	122.16	1,000	202.78	09FMN-BMTN-A-TF(LF)(SN)
	10	9.0	12.0	11.0	455-1932-1-ND	3.87	32.24	128.95	1,000	214.06	10FMN-BMTN-A-TF(LF)(SN)
	13	12.0	15.0	14.0	455-1938-1-ND	4.56	38.01	152.04	1,000	252.39	13FMN-BMTN-A-TF(LF)(SN)
	14	13.0	16.0	15.0	455-1940-1-ND	4.74	39.48	157.91	1,000	262.14	14FMN-BMTN-A-TF(LF)(SN)
	15	14.0	17.0	16.0	455-1943-1-ND	4.99	41.63	166.52	1,000	276.42	15FMN-BMTN-A-TF(LF)(SN)
	20	19.0	22.0	21.0	455-1949-1-ND	6.29	52.39	209.56	1,000	347.87	20FMN-BMTN-A-TF(LF)(SN)
25	24.0	27.0	26.0	455-1954-1-ND	7.28	60.66	242.61	1,000	402.74	25FMN-BMTN-A-TF(LF)(SN)	
40	39.0	42.0	41.0	455-1958-1-ND	10.58	88.14	352.57	1,000	585.26	40FMN-BMTN-A-TF(LF)(SN)	
<b>Top Entry — Staggered (Reverse)</b>											
1D	10	9.0	12.0	11.0	455-1933-1-ND	3.87	32.24	128.95	1,000	214.06	10FMN-BMTR-A-TB(LF)(SN)
	12	11.0	14.0	13.0	455-1936-1-ND	4.39	36.54	146.16	1,000	242.62	12FMN-BMTR-A-TB(LF)(SN)
	14	13.0	16.0	15.0	455-1941-1-ND	4.74	39.48	157.91	1,000	262.14	14FMN-BMTR-A-TB(LF)(SN)
	16	15.0	18.0	17.0	455-1944-1-ND	5.31	44.24	176.95	2,000	293.73/M	16FMN-BMTR-A-TB(LF)(SN)
	18	17.0	20.0	19.0	455-1948-1-ND	5.71	47.63	190.52	2,000	316.27/M	18FMN-BMTR-A-TB(LF)(SN)
	20	19.0	22.0	21.0	455-1950-1-ND	6.29	52.39	209.56	1,000	347.87	20FMN-BMTR-A-TB(LF)(SN)
<b>Side Entry</b>											
2	4	3.0	7.0	5.0	455-1919-1-ND	2.56	21.35	85.41	2,000	141.79/M	04FMN-SMT-A-TF(LF)(SN)
	5	4.0	8.0	6.0	455-1921-1-ND	2.77	23.05	92.20	2,000	153.06/M	05FMN-SMT-A-TF(LF)(SN)
	6	5.0	9.0	7.0	455-1923-1-ND	2.96	24.71	98.82	2,000	164.04/M	06FMN-SMT-A-TF(LF)(SN)
	7	6.0	10.0	8.0	455-1924-1-ND	3.17	26.40	105.61	2,000	175.32/M	07FMN-SMT-A-TF(LF)(SN)
	8	7.0	11.0	9.0	455-1927-1-ND	3.46	28.89	115.54	2,000	191.80/M	08FMN-SMT-A-TF(LF)(SN)
	9	8.0	12.0	10.0	455-1929-1-ND	3.67	30.54	122.16	2,000	202.78/M	09FMN-SMT-A-TF(LF)(SN)
	10	9.0	13.0	11.0	455-1934-1-ND	3.87	32.24	128.95	2,000	214.06/M	10FMN-SMT-A-TF(LF)(SN)
	12	11.0	15.0	13.0	455-1937-1-ND	4.39	36.54	146.16	2,000	242.62/M	12FMN-SMT-A-TF(LF)(SN)
	13	12.0	16.0	14.0	455-1939-1-ND	4.56	38.01	152.04	2,000	252.39/M	13FMN-SMT-A-TF(LF)(SN)
	14	13.0	17.0	15.0	455-1942-1-ND	4.74	39.48	157.91	2,000	262.14/M	14FMN-SMT-A-TF(LF)(SN)
	16	15.0	19.0	17.0	455-1945-1-ND	5.31	44.24	176.95	2,000	293.73/M	16FMN-SMT-A-TF(LF)(SN)
	20	19.0	23.0	21.0	455-1951-1-ND	6.29	52.39	209.56	2,000	347.87/M	20FMN-SMT-A-TF(LF)(SN)
	24	23.0	27.0	25.0	455-1953-1-ND	7.44	61.99	247.96	2,000	411.61/M	24FMN-SMT-A-TF(LF)(SN)
	26	25.0	29.0	27.0	455-1955-1-ND	7.85	65.38	261.53	2,000	434.14/M	26FMN-SMT-A-TF(LF)(SN)
28	27.0	31.0	29.0	455-1956-1-ND	8.29	69.09	276.34	2,000	458.73/M	28FMN-SMT-A-TF(LF)(SN)	

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

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