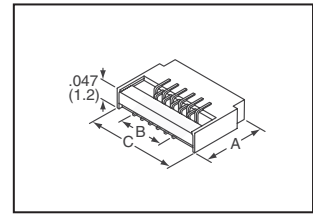




# 0.30 mm (0.012") FFC-FPC Connectors

## SFYL and SFYL-U Series



The SFYL and SFYL-U Series are a 0.30 mm (0.012 in) pitch cable to board connector with an ultra low profile. The series adopts the Surface Mount Technology (SMT) and Zero Insertion Force (ZIF) or Low Insertion Force (LIF) mechanism which enable easier cable insertion. These are suitable for high density design of consumer equipment, especially CD-ROM Drive, Digital Still Camera (DSC), Digital Video Camera (DVC) and Mobile Phone.

• Design against solder and flux wicking

**Materials:**

• **Housing/Actuator:** Glass reinforced high temperature thermoplastic (UL94V-0)  
 • **Color:** Housing: White; Actuator: Black • **Contact:** Copper Alloy

**Mechanical and Electrical Performance:**

• **Durability (Actuator Operation):** 10 cycle maximum • **Temperature Range:** -25°C - 85°C • **Insulation Resistance:** 50MΩ minimum • **Withstanding Voltage:** AC 200V • **Current Rating:** AC/DC 0.2A

**A**

No. of Positions	Dimensions - Inch (mm)			Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape and Reel Pricing 4,500	FCI Part No.
	A	B	C		1	25	100			
<b>SFYL Series — Lower Contact Location</b>										
21	0.118 (3.00)	0.213 (5.40)	0.339 (8.60)	609-1217-1-ND	1.05	.57	.49	609-1217-2-ND	406.56/M	10013057-211200ELF
<b>SFYL-U Series — Upper Contact Location</b>										
39	0.146 (3.70)	0.425 (10.80)	0.551 (14.00)	609-1230-1-ND	1.42	.77	.68	609-1230-2-ND	474.17/M	10017251-392240ELF

# 0.50 mm (0.020") FFC-FPC Connectors

## SMT/ZIF Type



The Gas-Tight, High Pressure (GTH) contact system ensures a low cost connection with reliability equal to gold plating. The Zero Insertion Force (ZIF) connection allows an increased number of mating cycles with minimal wear. The ZIF pre-holding process provides a stable and reliable mating operation. The slider ensures maximum cable retention with a minimum size. Fork shaped contacts mean stable and low contact resistance. The cable lock option provides cable strain relief as well as full retention of the cable.

**62674 Series:**

• **Housing:** Resin, Glass Reinforced, UL94V-0, Black • **Slider:** Resin, Glass Reinforced, UL94V-0, Brown • **Contact:** Phosphor Bronze, Tin Alloy Plated

**62684 Series:**

• **Housing:** Glass Filled Thermoplastic, UL94V-0, Beige • **Slider:** Glass Filled Thermoplastic, UL94V-0, Black • **Contact:** Phosphor Bronze, Tin Alloy Plated

**SFV Series:**

• **Housing:** Polyamide Resin, Glass Reinforced, UL94V-0, Black • **Slider:** PPS Resin, Glass Reinforced, UL94V-0, Brown (with cable-lock: Black) • **Contact:** Phosphor Bronze, Tin Alloy Plated

**Specifications:** • **Contact Resistance:** 30mΩ maximum  
 • **Insulation Resistance:** 100MΩ minimum • **Durability (Mating Cycles):** 20 Cycles • **Temperature Range:** -55°C - 85°C  
 • **Current Rating:** 0.5 A AC/DC • **Voltage Rating:** 50 V AC/DC

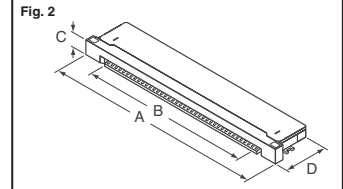
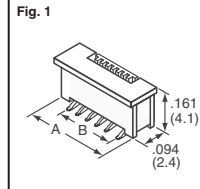


Fig.	No. of Positions	Contact Location	Dimension - Inch (mm)				Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape and Reel		FCI Part No.
			A	B	C	D		1	25	100		Qty.	Pricing	
<b>62674 Series — Top Entry Without Cable Lock (Gold Plated)</b>														
1	8	—	0.335 (8.50)	0.138 (3.50)	—	—	609-1204-1-ND	.52	.27	.21	609-1204-2-ND	1,000	160.18	62674-081121ALF
	12	—	0.413 (10.50)	0.217 (5.50)	—	—	609-1205-1-ND	.54	.27	.23	609-1205-2-ND	1,000	169.62	62674-121121ALF
	20	—	0.571 (14.50)	0.374 (9.50)	—	—	609-1207-1-ND	.60	.30	.25	609-1207-2-ND	1,000	190.58	62674-201121ALF
	21	—	0.591 (15.00)	0.394 (10.00)	—	—	609-1208-1-ND	.57	.28	.24	609-1208-2-ND	1,000	180.12	62674-211121ALF
	24	—	0.650 (16.50)	0.453 (11.50)	—	—	609-1210-1-ND	.61	.32	.27	609-1210-2-ND	1,000	217.80	62674-241121ALF
	26	—	0.689 (17.50)	0.492 (12.50)	—	—	609-1212-1-ND	.67	.35	.29	609-1212-2-ND	1,000	228.69	62674-261121ALF
	30	—	0.768 (19.50)	0.571 (14.50)	—	—	609-1213-1-ND	.68	.35	.30	609-1213-2-ND	1,000	239.13	62674-301121ALF
	32	—	0.807 (20.50)	0.610 (15.50)	—	—	609-1214-1-ND	.70	.37	.32	609-1214-2-ND	1,000	253.19	62674-321121ALF
33	—	0.827 (21.00)	0.630 (16.00)	—	—	609-1215-1-ND	.89	.47	.40	609-1215-2-ND	1,000	313.09	62674-331121ALF	
<b>62684 Series — Side Entry Without Cable Lock (Gold Plated)</b>														
2	40	Lower	0.957 (24.30)	0.768 (19.50)	0.079 (2.00)	0.197 (5.00)	609-1195-1-ND	.83	.42	.35	609-1195-2-ND	2,000	275.74/M	62684-401100ALF
	45	Lower	1.055 (26.80)	0.866 (22.00)	0.079 (2.00)	0.197 (5.00)	609-1196-1-ND	.92	.51	.43	609-1196-2-ND	2,000	334.13/M	62684-451100ALF
	50	Lower	0.957 (24.30)	0.965 (24.50)	0.079 (2.00)	0.197 (5.00)	609-1197-1-ND	.86	.46	.39	609-1197-2-ND	2,000	305.14/M	62684-501100ALF
	32	Upper	0.799 (20.30)	0.610 (15.50)	0.079 (2.00)	0.197 (5.00)	609-1198-1-ND	.69	.35	.29	609-1198-2-ND	2,000	228.80/M	62684-322100ALF
	34	Upper	0.839 (21.30)	0.650 (16.50)	0.079 (2.00)	0.197 (5.00)	609-1199-1-ND	.72	.37	.32	609-1199-2-ND	2,000	240.56/M	62684-342100ALF
	40	Upper	0.957 (24.30)	0.768 (19.50)	0.079 (2.00)	0.197 (5.00)	609-1200-1-ND	.90	.50	.42	609-1200-2-ND	2,000	326.76/M	62684-402100ALF
	45	Upper	1.055 (26.80)	0.866 (22.00)	0.079 (2.00)	0.197 (5.00)	609-1201-1-ND	.79	.41	.35	609-1201-2-ND	2,000	270.40/M	62684-452100ALF
	50	Upper	1.154 (29.3)	0.965 (24.50)	0.079 (2.00)	0.197 (5.00)	609-1202-1-ND	1.04	.58	.49	609-1202-2-ND	2,000	377.08/M	62684-502100ALF
	55	Upper	1.252 (31.8)	1.063 (27.00)	0.079 (2.00)	0.197 (5.00)	609-2840-1-ND	.70	.38	.34	609-2840-2-ND	2,000	235.26/M	62684-552100ALF
	<b>SFV Series — Side Entry, Lower Contact Location Without Cable Lock</b>													
2	4	Lower	0.295 (7.50)	0.059 (1.50)	0.071 (1.80)	0.165 (4.20)	609-1846-1-ND	.66	.34	.29	609-1846-2-ND	3,000	155.80/M	SFV4R-1STE1LF
	5	Lower	0.315 (8.00)	0.079 (2.00)	0.071 (1.80)	0.165 (4.20)	609-1848-1-ND	.70	.37	.31	609-1848-2-ND	3,000	227.70/M	SFV5R-1STE1LF
	6	Lower	0.335 (8.50)	0.098 (2.50)	0.071 (1.80)	0.165 (4.20)	609-1850-1-ND	.87	.49	.41	609-1850-2-ND	3,000	311.09/M	SFV6R-1STE1LF
	10	Lower	0.413 (10.50)	0.177 (4.50)	0.071 (1.80)	0.165 (4.20)	609-1856-1-ND	1.00	.54	.47	609-1856-2-ND	3,000	358.89/M	SFV10R-1STE1LF
	12	Lower	0.453 (11.50)	0.217 (5.50)	0.071 (1.80)	0.165 (4.20)	609-1858-1-ND	.75	.42	.35	—	—	—	SFV12R-1STE1LF
	14	Lower	0.492 (12.50)	0.256 (6.50)	0.071 (1.80)	0.165 (4.20)	609-1860-1-ND	.78	.43	.36	609-1860-2-ND	3,000	276.44/M	SFV14R-1STE1LF
	15	Lower	0.512 (13.00)	0.276 (7.00)	0.071 (1.80)	0.165 (4.20)	609-1862-1-ND	.79	.44	.37	609-1862-2-ND	3,000	280.78/M	SFV15R-1STE1LF
	16	Lower	0.531 (13.50)	0.295 (7.50)	0.071 (1.80)	0.165 (4.20)	609-1864-1-ND	.78	.44	.37	609-1864-2-ND	3,000	278.92/M	SFV16R-1STE1LF
	18	Lower	0.571 (14.50)	0.335 (8.50)	0.071 (1.80)	0.165 (4.20)	609-1866-1-ND	1.20	.65	.57	609-1866-2-ND	3,000	453.41/M	SFV18R-1STE1LF
	20	Lower	0.610 (15.50)	0.374 (9.50)	0.071 (1.80)	0.165 (4.20)	609-1868-1-ND	1.31	.74	.64	—	—	—	SFV20R-1STE1LF
	24	Lower	0.689 (17.50)	0.453 (11.50)	0.071 (1.80)	0.165 (4.20)	609-1875-1-ND	1.31	.73	.64	—	—	—	SFV24R-1STE1LF
	26	Lower	0.728 (18.50)	0.492 (12.50)	0.071 (1.80)	0.165 (4.20)	609-1877-1-ND	.60	.34	.28	609-1877-2-ND	3,000	214.67/M	SFV26R-1STE1LF
28	Lower	0.768 (19.50)	0.531 (13.50)	0.071 (1.80)	0.165 (4.20)	609-1879-1-ND	1.02	.57	.49	609-1879-2-ND	3,000	376.38/M	SFV28R-1STE1LF	
30	Lower	0.807 (20.50)	0.571 (14.50)	0.071 (1.80)	0.165 (4.20)	609-1881-1-ND	1.07	.59	.50	609-1881-2-ND	3,000	380.51/M	SFV30R-1STE1LF	
<b>SFV Series — Side Entry, Upper Contact Location Without Cable Lock</b>														
2	4	Upper	0.295 (7.50)	0.059 (1.50)	0.071 (1.80)	0.165 (4.20)	609-1847-1-ND	.66	.34	.29	609-1847-2-ND	3,000	155.80/M	SFV4R-2STE1LF
	5	Upper	0.315 (8.00)	0.079 (2.00)	0.071 (1.80)	0.165 (4.20)	609-1849-1-ND	.78	.43	.37	609-1849-2-ND	3,000	277.57/M	SFV5R-2STE1LF
	6	Upper	0.335 (8.50)	0.098 (2.50)	0.071 (1.80)	0.165 (4.20)	609-1851-1-ND	1.07	.60	.52	609-1851-2-ND	3,000	397.42/M	SFV6R-2STE1LF
	8	Upper	0.374 (9.50)	0.138 (3.50)	0.071 (1.80)	0.165 (4.20)	609-1855-1-ND	.62	.31	.26	609-1855-2-ND	3,000	192.33/M	SFV8R-2STE1LF
	10	Upper	0.413 (10.50)	0.177 (4.50)	0.071 (1.80)	0.165 (4.20)	609-1857-1-ND	.56	.29	.25	609-1857-2-ND	3,000	184.23/M	SFV10R-2STE1LF
	12	Upper	0.453 (11.50)	0.217 (5.50)	0.071 (1.80)	0.165 (4.20)	609-1859-1-ND	.75	.42	.35	—	—	—	SFV12R-2STE1LF
	14	Upper	0.492 (12.50)	0.256 (6.50)	0.071 (1.80)	0.165 (4.20)	609-1861-1-ND	.78	.43	.36	—	—	—	SFV14R-2STE1LF
	15	Upper	0.512 (13.00)	0.276 (7.00)	0.071 (1.80)	0.165 (4.20)	609-1863-1-ND	.93	.50	.43	609-1863-2-ND	3,000	339.03/M	SFV15R-2STE1LF
	18	Upper	0.571 (14.50)	0.335 (8.50)	0.071 (1.80)	0.165 (4.20)	609-1867-1-ND	.83	.46	.39	609-1867-2-ND	3,000	293.92/M	SFV18R-2STE1LF
	20	Upper	0.610 (15.50)	0.374 (9.50)	0.071 (1.80)	0.165 (4.20)	609-1869-1-ND	1.11	.63	.54	609-1869-2-ND	3,000	414.29/M	SFV20R-2STE1LF

(Continued)

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.

**Free shipping on orders over £50! All prices are in British pound sterling and include duties.**



## 0.50 mm (0.020") FFC-FPC Connectors

SMT/ZIF Type (Cont.)

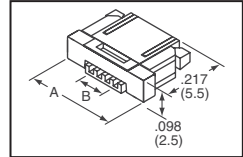


Fig.	No. of Positions	Contact Location	Dimension - Inch (mm)				Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape and Reel		FCI Part No.
			A	B	C	D		1	25	100		Qty.	Pricing	
2	22	Upper	0.650 (16.50)	0.413 (10.50)	0.071 (1.80)	0.165 (4.20)	609-1874-1-ND	1.00	.56	.48	609-1874-2-ND	3,000	375.56/M	SFV22R-2STE1LF
	24	Upper	0.689 (17.50)	0.453 (11.50)	0.071 (1.80)	0.165 (4.20)	609-1876-1-ND	1.02	.56	.48	—	—	—	SFV24R-2STE1LF
	26	Upper	0.728 (18.50)	0.492 (12.50)	0.071 (1.80)	0.165 (4.20)	609-1878-1-ND	.97	.54	.45	609-1878-2-ND	3,000	343.58/M	SFV26R-2STE1LF
	28	Upper	0.768 (19.50)	0.531 (13.50)	0.071 (1.80)	0.165 (4.20)	609-1880-1-ND	1.02	.57	.48	609-1880-2-ND	6,000	364.68/M	SFV28R-2STE1LF
	30	Upper	0.807 (20.50)	0.571 (14.50)	0.071 (1.80)	0.165 (4.20)	609-1882-1-ND	1.47	.87	.75	—	—	—	SFV30R-2STE1LF
<b>SFV Series — Side Entry With Cable-Lock</b>														
2	20	Upper	0.610 (15.50)	0.374 (9.50)	0.071 (1.80)	0.165 (4.20)	609-1870-1-ND	.89	.50	.42	609-1870-2-ND	3,000	319.27/M	SFV20R-4STE1LF
<b>Side Entry</b>														
2	10	Lower	0.295 (7.50)	0.177 (4.50)	0.047 (1.20)	0.134 (3.40)	609-1234-1-ND	.76	.38	.32	609-1234-2-ND	4,500	232.78/M	10051922-1010ELF
	12	Lower	0.335 (8.50)	0.217 (5.50)	0.047 (1.20)	0.134 (3.40)	609-1236-1-ND	.62	.33	.28	609-1236-2-ND	4,500	198.64/M	10051922-1210ELF
	14	Lower	0.374 (9.50)	0.256 (6.50)	0.047 (1.20)	0.134 (3.40)	609-1237-1-ND	.64	.33	.28	609-1237-2-ND	4,500	201.74/M	10051922-1410ELF
	15	Lower	0.394 (10.00)	0.276 (7.00)	0.047 (1.20)	0.134 (3.40)	609-1238-1-ND	.69	.35	.29	609-1238-2-ND	4,500	217.26/M	10051922-1510ELF
	24	Lower	0.571 (14.50)	0.453 (11.50)	0.047 (1.20)	0.134 (3.40)	609-1241-1-ND	.84	.45	.38	609-1241-2-ND	4,500	276.46/M	10051922-2410ELF
	30	Lower	0.689 (17.50)	0.571 (14.50)	0.047 (1.20)	0.134 (3.40)	609-1244-1-ND	.94	.52	.44	609-1244-2-ND	4,500	330.34/M	10051922-3010ELF
57	Lower	1.220 (31.00)	1.102 (28.00)	0.047 (1.20)	0.134 (3.40)	609-1233-1-ND	2.03	1.10	.96	—	—	—	10042867-57MB10ELF	

A

## 0.80 mm (0.031") FFC-FPC Connectors

SMT/ZIF Type



The Gas-Tight, High Pressure (GTH) contact system ensures a low cost connection with reliability equal to gold plating. The Zero Insertion Force (ZIF) connection allows an increased number of mating cycles with minimal wear. The ZIF pre-holding process provides a stable and reliable mating operation. The slider ensures maximum cable retention with a minimum size. Fork shaped contacts mean stable and low contact resistance. The cable lock option provides cable strain relief as well as full retention of cable.

**Specifications:** • Housing Material: Glass Reinforced PPS, UL94V-0 • Contact Material: Phosphor Bronze, Matte pure Tin plated • Contact Resistance: 30mΩ maximum • Insulation Resistance: 500MΩ minimum • Durability (Mating Cycles): 20 Cycles • Temperature Range: -55°C - 85°C • Current Rating: 0.5A AC/DC • Voltage Rating: 100V AC/DC

No. of Positions	Dimensions - Inch (mm)		Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape and Reel		FCI Part No.
	A	B		1	25	100		Qty.	Pricing	
6	0.402 (10.20)	0.157 (4.00)	609-1171-1-ND	.69	.35	.30	609-1171-2-ND	2,000	230.33/M	SFR6R-1STE1LF
8	0.465 (11.80)	0.220 (5.60)	609-1172-1-ND	.73	.39	.33	609-1172-2-ND	2,000	242.71/M	SFR8R-1STE1LF
10	0.528 (13.40)	0.283 (7.20)	609-1173-1-ND	.81	.43	.37	609-1173-2-ND	2,000	273.95/M	SFR10R-1STE1LF
12	0.591 (15.00)	0.346 (8.80)	609-1174-1-ND	.77	.43	.36	609-1174-2-ND	2,000	279.39/M	SFR12R-1STE1LF
24	0.969 (24.60)	0.724 (18.40)	609-1180-1-ND	.91	.52	.42	609-1180-2-ND	2,000	337.60/M	SFR24R-1STE1LF
28	1.094 (27.80)	0.850 (21.60)	609-1182-1-ND	1.07	.58	.50	609-1182-2-ND	2,000	399.82/M	SFR28R-1STE1LF
30	1.157 (29.40)	0.913 (23.20)	609-1183-1-ND	2.15	1.16	1.00	609-1183-2-ND	2,000	799.74/M	SFR30R-1STE1LF

## 1.00 mm (0.039") FFC-FPC Connectors



The Gas-Tight, High pressure (GTH) contact system ensures a low cost connection with reliability equal to gold plating. The Zero Insertion Force (ZIF) connection allows an increased number of mating cycles with minimal wear. The ZIF pre-holding process allows a stable and reliable mating operation. The Low Insertion Force (LIF) contacts positioning provides a reliable and easy mating operation. The slider ensures maximum cable retention with a minimum size. Fork shaped contacts mean stable and low contact resistance. Kinked solder tails provide added PCB retention.

**Specifications:** • Current Rating: 1A AC/DC • Voltage Rating: 100V AC/DC • Contact Resistance: 30mΩ maximum • Insulation Resistance: 500MΩ minimum • Durability (Mating Cycles): ZIF - 20 cycles, LIF - 30 cycles • Temperature Range: -55°C - 85°C

**SLW Series:** • Housing: Nylon, Glass Reinforced, UL94V-0, Black • Slider: Nylon, Glass Reinforced, UL94V-0, Black • Contact: Phosphor Bronze, Tin Alloy Plated  
**HLW Series:** • Housing: PBT, Glass Reinforced, UL94V-0, Black • Contact: Phosphor Bronze, Tin Alloy Plated  
**HFV Series:** • Housing: Polyamide 6T, Glass Reinforced, UL94V-0, Black • Contact: Phosphor Bronze, Tin Alloy Plated  
**SFW Series:** • Housing: For Right Angle Version: PPS, Glass Reinforced, UL94V-0 For FPC/FCC: Housing Color: Brown (with cable-lock: Black) Slider Color: Black (with cable-lock: Brown) For Vertical Version: Heat-Resisting Resin, Glass Reinforced, UL94V-0 Housing Color: Brown Slider Color: Black • Contact Phosphor Bronze, Tin Alloy Plated

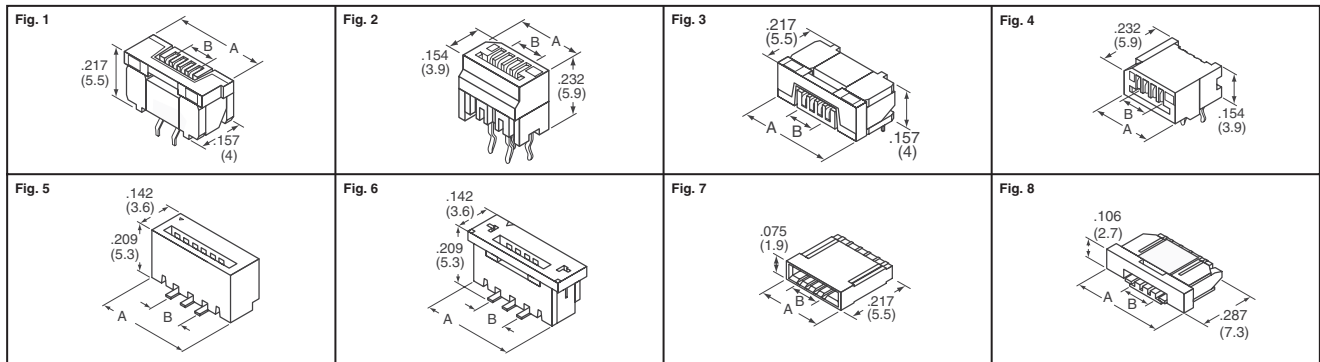


Fig.	No. of Positions	Dimension - Inch (mm)		Digi-Key Part No.	Cut Tape Pricing			Digi-Key Part No.	Tape and Reel		FCI Part No.
		A	B		1	25	100		Qty.	Pricing	
<b>SLW Series — Top Entry PC Mount ZIF</b>											
1	4	0.402 (10.20)	0.205 (5.20)	609-1929-ND†	.40	4.86	15.55	—	—	—	SLW4S-1C7LF
	5	0.441 (11.20)	0.244 (6.20)	609-1931-ND†	.60	6.19	19.79	—	—	—	SLW5S-1C7LF
	6	0.480 (12.20)	0.283 (7.20)	609-1933-ND†	.49	5.10	16.34	—	—	—	SLW6S-1C7LF
	8	0.559 (14.20)	0.362 (9.20)	609-1935-ND†	.42	5.13	16.39	—	—	—	SLW8S-1C7LF
	10	0.638 (16.20)	0.441 (11.20)	609-1937-ND†	.46	5.67	18.15	—	—	—	SLW10S-1C7LF
	12	0.717 (18.20)	0.520 (13.20)	609-1939-ND†	.86	11.86	39.89	—	—	—	SLW12S-1C7LF
	14	0.795 (20.20)	0.598 (15.20)	609-1941-ND†	.52	6.37	21.23	—	—	—	SLW14S-1C7LF
	15	0.835 (21.20)	0.638 (16.20)	609-1943-ND†	.98	13.16	45.12	—	—	—	SLW15S-1C7LF
	16	0.874 (22.20)	0.677 (17.20)	609-1945-ND†	.97	12.97	44.47	—	—	—	SLW16S-1C7LF
	18	0.953 (24.20)	0.756 (19.20)	609-1947-ND†	.73	7.54	25.56	—	—	—	SLW18S-1C7LF

† Bulk

(Continued)

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