



## SMK (2.92mm) Connectors

SMK Connectors provide an excellent solution for applications requiring high frequency transmission. Similar to the SMA interface, a smaller internal body diameter (2.92mm) and air dielectric provide a higher cutoff frequency and other key advantages: • Superior electrical performance to 40GHz • Female contacts have a three-slot

construction, which enhances connectivity • The Field Replacement Jacks with a high quality hermetic seal feed thru for use in sealed circuit modules • The SMK plug interface employs more precise dimensions than an SMA and uses a shorter snub nose male pin such that the connector bodies align before the contacts engage

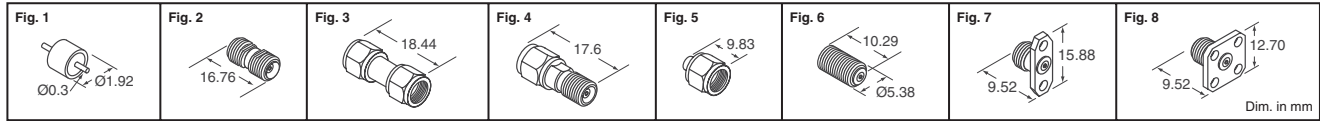


Fig.	Description	Plating	Digi-Key Part No.	Price Each	Johnson Part No.
<b>Adapter</b>					
1	Hermetic Seal Feedthru	—	J688-ND	15.73 12.36 10.34	142-1000-033
2	Jack to Jack In-series Adapter	Gold	J694-ND	81.90 70.88 63.00	145-0901-801
3	Plug to Plug In-series Adapter	Gold	J695-ND	78.00 67.50 60.00	145-0901-811
4	Plug to Jack In-series Adapter	Gold	J696-ND	71.50 61.88 55.00	145-0901-821
<b>Plug</b>					
5	Straight Solder Type w/Contact, Slide-on Nut	Passivated	J689-ND	18.55 14.58 12.19	145-0693-002
	Straight Solder Type w/Contact, Slide-on Nut	Passivated	J690-ND	18.03 14.17 11.85	145-0694-002
<b>Receptacle</b>					
6	Thread Mount Field Replaceable	Passivated	J691-ND	19.95 15.68 13.11	145-0701-002
7	2-Hole Flange Mount Jack	Passivated	J692-ND	30.80 24.20 20.24	145-0701-602
8	4-Hole Flange Mount Jack	Passivated	J693-ND	28.70 22.55 18.86	145-0701-612

Description	Digi-Key Part No.	Price Each	Johnson Part No.
<b>Tools</b>			
Bead Assembly Tool	J697-ND	27.90	140-0000-957
Body Soldering Tool for .086 Semi-Rigid	J698-ND	12.40	140-0000-958
Body Soldering Tool for .141 Semi-Rigid	J699-ND	12.40	140-0000-959
Contact Soldering Tool for .086 Semi-Rigid	J700-ND	11.62	140-0000-960
Contact Soldering Tool for .141 Semi-Rigid	J701-ND	11.62	140-0000-961
Cable Vise Tool	J702-ND	557.92	140-0000-962
Cable Clamp Insert Tool for .086 Semi-Rigid	J703-ND	96.30	140-0000-964
Cable Clamp Insert Tool for .141 Semi-Rigid	J704-ND	96.30	140-0000-965
Vise Stop Tool	J705-ND	10.85	140-0000-968

## RF Connectors MMCX Type



**ELECTRICAL RATINGS:** • Impedance: 50Ω • Frequency Range: 0 - 6 GHz • Working Voltage: 170 Vrms at sea level • Insulation Resistance: 1000MΩ minimum

**MECHANICAL RATINGS:** • Engagement/Disengagement Force: 8.0 pounds maximum engagement; 1.4 pounds minimum disengagement • Contact Retention Force: 2.0 pounds minimum axial force • Cable Retention: 30 pounds • Durability: 500 cycles minimum

**ENVIRONMENTAL RATINGS:** • Operating Temperature: -55°C - 155°C

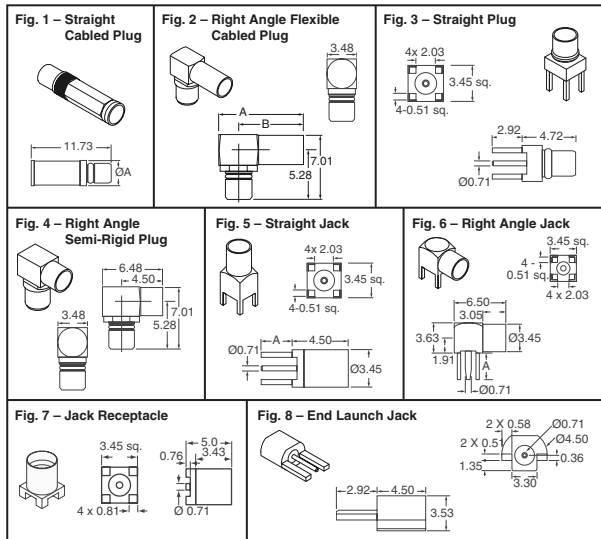


Fig.	Cable Type/Description	Dim. (mm)	Digi-Key Part No.	Price Each	Johnson Part No.
1	RG 178/U, 196	3.48	J589-ND	6.13 5.38 4.63	135-3402-001
	RG 316/U, 188, 161, 174	4.39	J590-ND	9.14 8.02 6.89	135-3403-001
	RG 316 DS, 188 DS, 187 DS	4.39	J591-ND	8.12 7.12 6.12	135-3404-001
2	.047" Diameter Flexible, Huber K01152-07, Axon P512479A	3.48	J592-ND	5.31 4.66 4.01	135-3436-001
	RG 178/U, 196	8.99 7.01	J593-ND	10.77 9.45 8.12	135-3402-101
	RG 316/U, 188, 187, 179, 161, 174	10.46 8.48	J594-ND	10.65 9.34 8.03	135-3403-101
3	RG 316 DS, RG 188 DS	10.46 8.48	J595-ND	9.43 8.28 7.12	135-3404-101
	.047" Diameter Flexible, Huber K01152-07, Axon P512479A	8.99 7.01	J596-ND	9.33 8.19 7.04	135-3436-101
	—	—	J601-ND	11.64 10.21 8.78	135-3801-201
4	—	—	J602-ND	9.33 8.19 7.04	135-3693-101
5	Straight - Gold PCB	2.92	J597-ND	6.19 5.43 4.67	135-3701-201
	Straight - Gold PCB	1.73	J598-ND	6.26 5.49 4.72	135-3701-211
6	Right Angle - Gold PCB	2.92	J599-ND	13.13 11.52 9.90	135-3701-301
	Right Angle - Gold PCB	1.73	J600-ND	12.57 11.03 9.48	135-3701-311
7	Jack Receptacle - Gold SMD	—	J821-ND	8.06 7.08 6.08	135-3711-201
8	End Launch - PCB	—	J603-ND	6.38 5.60 4.81	135-3711-801
Hand Crimp Tool (frame only)				106.63/1	140-0000-952
Crimp Tool Die Set				221.90/1	140-0000-953

## SMA Reverse Polarity Plugs and Receptacles



**Electrical Ratings:** • Impedance: 50Ω • Insulation Resistance: 5000 MΩ minimum • **Mechanical Ratings:** • Engagement Design: MIL-C-39012, Series SMA • Engagement/Disengagement Force: 2 inch-pounds maximum • Mating Torque: 7 - 10 inch-pounds • Bulkhead Mounting Nut Torque: 15 inch-pounds • Coupling Proof Torque: 15 inch-pounds minimum • Coupling Nut Retention: 60 Pounds minimum • Durability: 500 Cycles minimum • **Environmental Ratings:** (Meets or exceeds the applicable paragraph of MIL-C-39012) • Temperature Range: -65°C - 165°C • Thermal Shock: MIL-STD-202, Method 107, Condition B • Corrosion: • MIL-STD-202, Method 101, Condition B • Shock: MIL-STD-202, Method 213, Condition I • Vibration: MIL-STD-202, Method 204, Condition D • Moisture Resistance: MIL-STD-202, Method 106 • **Material Specifications:** • Bodies: Brass per QQ-B-626, Gold Plated per MIL-G-45204 .00001" minimum or nickel plated per QQ-N-290 • Contacts: Male: Brass per QQ-B-626, Gold Plated per MIL-G-45204 .00001" minimum; Female: Beryllium Copper per QQ-C-530, Gold Plated per MIL-G-45204 .00003" minimum

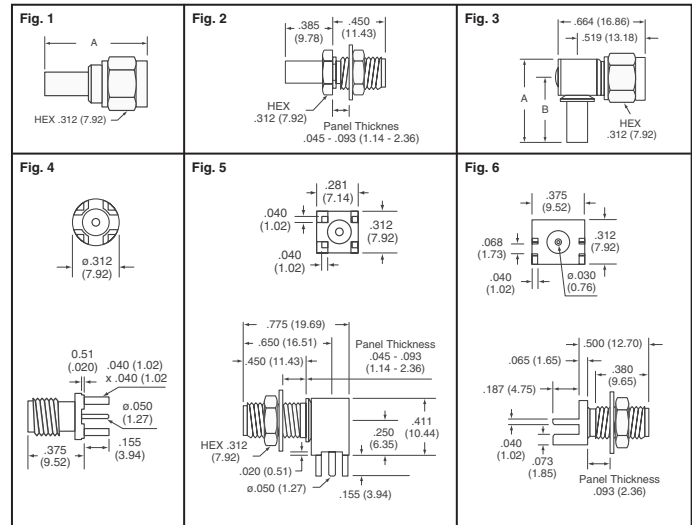


Fig.	Cable Type	Dimension - Inch (mm)	VSWR	Frequency Range (GHz)	Digi-Key Part No.	Price Each	Johnson Part No.
<b>Straight Crimp Type Plug</b>							
1	RG-316	706 (17.93)	—	1.15 + .02f	J908-ND	10.66 9.48 7.51	142-4403-001
	RG-316DS	706 (17.93)	—	1.15 + .02f	J909-ND	11.05 9.83 7.78	142-4404-001
	RG-58	706 (17.93)	—	1.17 + .025f	J910-ND	11.05 9.83 7.78	142-4407-001
<b>Straight Crimp Type Bulkhead Jack</b>							
2	RG-316	—	—	—	J905-ND	9.30 8.27 6.55	142-4303-401
	RG-316DS	—	—	—	J906-ND	9.70 8.63 6.83	142-4304-401
	RG-58	—	—	—	J907-ND	11.16 9.92 7.86	142-4307-401
<b>Right Angle Crimp Type Plug</b>							
3	RG-316	611 (15.52)	470 (11.94)	1.15 + .03f	J911-ND	11.45 10.18 8.06	142-4403-101
	RG-316DS	611 (15.52)	470 (11.94)	1.15 + .03f	J912-ND	11.05 9.83 7.78	142-4404-101
	RG-58	611 (15.52)	470 (11.94)	1.17 + .06f	J913-ND	11.84 10.53 8.34	142-4407-101
	LMR-240	635 (16.13)	490 (12.45)	1.10 + .06f	J914-ND	11.39 10.13 8.02	142-4435-101
<b>Receptacles</b>							
4	Straight Jack	—	—	—	J915-ND	6.32 5.62 4.45	142-4701-201
5	Right Angle Bulkhead Jack	—	—	—	J916-ND	12.42 11.04 8.74	142-4701-501
6	End Launch Bulkhead Jack	—	—	—	J917-ND	7.20 6.41 5.07	142-4701-801

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