

Series: RF23C, Cable Assembly, 50 Ω



Part Number:

RF23C-XXXX-XXXX-XXXX

OVERALL ASSEMBLY LENGTH (OAL)  
XXXX (MILLIMETERS)  
(0100 MIN)

END 1 CONNECTOR

- 92SP: 2.92mm Plug
- 92SJ: 2.92mm Jack
- 24SP: 2.4mm Plug
- 24SJ: 2.4mm Jack
- M0SP: SMPM Plug (FD)
- M0SJ: SMPM Jack
- 01SP: SMA Plug
- 01BJ: SMA Bulkhead Jack
- 01SB: SMA Sealed Bulkhead Jack
- 00SJ: SMP Straight Jack
- 00MJ: SMP Right Angle Mitered Jack
- 00BF: SMP Bulkhead Plug (FD)
- 00BL: SMP Bulkhead Plug (LD)
- 00BC: SMP Bulkhead Plug (CM)
- 00BS: SMP Bulkhead Plug (SB)

END 2 CONNECTOR

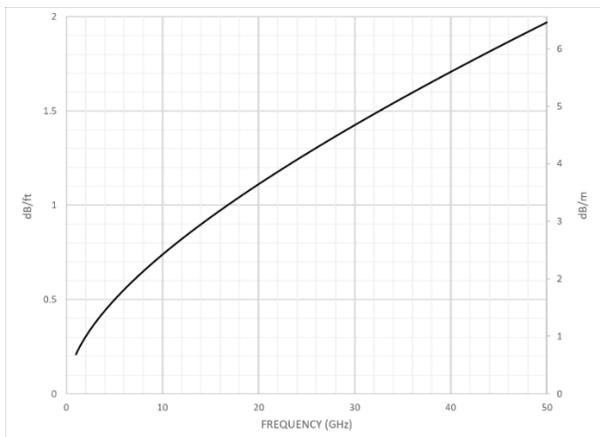
- 92SP: 2.92mm Plug
- 92SJ: 2.92mm Jack
- 24SP: 2.4mm Plug
- 24SJ: 2.4mm Jack
- M0SP: SMPM Plug (FD)
- M0SJ: SMPM Jack
- 01SP: SMA Plug
- 01BJ: SMA Bulkhead Jack
- 01SB: SMA Sealed Bulkhead Jack
- 00SJ: SMP Straight Jack
- 00MJ: SMP Right Angle Mitered Jack
- 00BF: SMP Bulkhead Plug (FD)
- 00BL: SMP Bulkhead Plug (LD)
- 00BC: SMP Bulkhead Plug (CM)
- 00BS: SMP Bulkhead Plug (SB)

Series: RF23C, Cable Assembly, 50 Ω

**ELECTRICAL DATA**

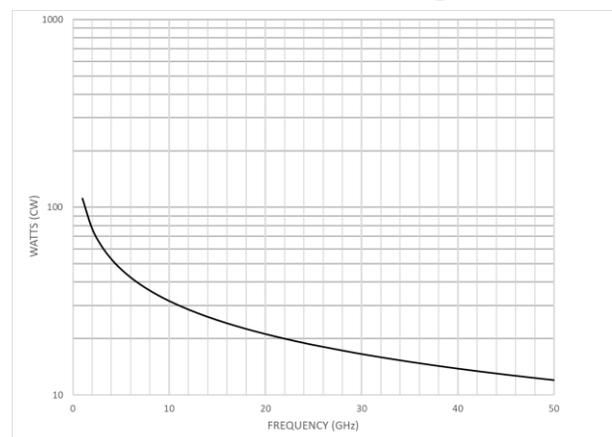
Impedance	50 Ω		
Frequency Range	2.92mm Plug, 2.92mm Jack	DC to 40 GHz	
	2.4mm Plug, 2.4mm Jack	DC to 50 GHz	
	SMPM Plug, SMPM Jack	DC to 50 GHz	
	SMA Plug, SMA Bulkhead Jack, SMA Sealed Bulkhead Jack	DC to 26.5 GHz	
	SMP Right Angle Mitered Jack	DC to 26.5 GHz	
	SMP Straight Jack, SMP Plug (FD, LD, CM, SB)	DC to 40 GHz	
	VSWR	2.92mm, 2.4mm	1.4:1 Max.
		SMPM	DC to 18 GHz: 1.2:1 Max. 18 GHz to 50 GHz: 1.4:1 Max.
		SMA	1.3:1 Max.
		SMP Right Angle Mitered Jack	1.25:1 Max.
		SMP Straight Jack, Plug (FD, LD, CM, SB)	DC to 26.5 GHz: 1.25:1 Max. 26.5 GHz to 40 GHz: 1.5:1 Max.
	Insertion Loss	<b>See Graph</b>	
Power Handling	<b>See Graph</b>		
Velocity of Propagation	70%		
Capacitance	84 pF/meter		
Time Delay	4.75 ns/meter		

**MAXIMUM INSERTION LOSS @ T=25°C<sup>1</sup>**



<sup>1</sup>Not including connector losses. Connector losses can be approximated as  $0.045 \times \sqrt{F(\text{GHz})}$  dB/connector.

**TYPICAL POWER HANDLING @ T=25°C<sup>2</sup>**



<sup>2</sup>Guideline, only. Actual power handling performance depends on mounting and cooling.

**Series:** [RF23C, Cable Assembly, 50 Ω](#)

### MECHANICAL DATA

Outer Diameter (cable only)	2.67 mm
Mass	19.7 grams/meter
Minimum Bend Radius (Static)	3.2 mm
Minimum Connector Retention	6.80 kg

### ENVIRONMENTAL DATA

Temperature Range	-65 to +125°C
Thermal Shock	EIA-364-32, -55°C to +85°C, 100 cycles

### CONNECTOR OPTIONS

End Option	Description	Drawing
29SP	2.92mm Plug	<a href="#">292-P-C-HP-ST-CS3 Drawing</a>
29SJ	2.92mm Jack	<a href="#">292-J-C-HP-ST-CS3 Drawing</a>
24SP	2.4mm Plug	<a href="#">PRF24-P-C-EP-23C-SS Drawing</a>
24SJ	2.4mm Jack	<a href="#">PRF24-J-C-EP-23C-SS Drawing</a>
MOSP	SMPM Plug (Full Detent)	<a href="#">PRFM0-P-C-EE-23C-SD Drawing</a>
MOSJ	SMPM Jack	<a href="#">PRFM0-J-C-EE-23C-SD Drawing</a>
01SP	SMA Plug	<a href="#">PRF01-P-C-EG-23C-SD Drawing</a>
01BJ	SMA Bulkhead Jack	<a href="#">PRF01-J-C-EG-23C-BD Drawing</a>
01SB	SMA Sealed Bulkhead Jack	<a href="#">PRF01-J-C-EG-23C-BD-1 Drawing</a>
00SJ	SMP Straight Jack	<a href="#">PRF00-J-C-EE-23C-SD Drawing</a>
00MJ	SMP Right Angle Mitered Jack	<a href="#">PRF00-J-C-EE-23C-RD Drawing</a>
00BF	SMP Bulkhead Plug (FD)	<a href="#">PRF00-PF-C-EG-23C-BD Drawing</a>
00BL	SMP Bulkhead Plug (LD)	<a href="#">PRF00-PL-C-EG-23C-BD Drawing</a>
00BC	SMP Bulkhead Plug (CM)	<a href="#">PRF00-PC-C-EG-23C-BD Drawing</a>
00BS	SMP Bulkhead Plug (SB)	<a href="#">PRF00-PS-C-EG-23C-BD Drawing</a>

Series: [RF23C, Cable Assembly, 50 Ω](#)

**ADDITIONAL INFORMATION**

Cable Type	Datasheet
Cable Assembly	<a href="#">RF23C Drawing</a>
Cable	<a href="#">MWC-2350CU-01 Datasheet</a>

**USE OF PRODUCT SPECIFICATION SHEET**

This Product Specification Sheet (“PSS”) is a brief summary of information related to the Product identified. As a summary, it should only be used for the limited purpose of considering the purchase/use of Product. This PSS is the property of Samtec, Inc. (“Samtec”) and contains proprietary information of Samtec, our various licensors, or both. Samtec does not grant express or implied rights or license under any patent, copyright, trademark or other proprietary rights and the use of the PSS for building, reverse engineering or replication is strictly prohibited. By using the PSS, the user agrees to not infringe, directly or indirectly, upon any intellectual property rights of Samtec and acknowledges that Samtec, our various licensors, or both own all intellectual property therein. The PSS is presented “AS IS”. While Samtec makes every effort to present excellent information, the PSS is only provided as a guideline and does not, therefore, warrant it is without error or defect or that the PSS contains all necessary and/or relevant information about the Product. The user agrees that all access and use of the PSS is at its own risk. **NO WARRANTIES EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY KIND WHATSOEVER ARE PROVIDED.**