



## 2.92 mm TO 40 GHz

### 2.92 mm Cable Assemblies

RF047-A, RF086, RF085, RF23C



#### VSWR

**RF047-A:** 1.35 max.  
**RF086:** 1.40 max.  
**RF085:** 1.40 max.  
**RF23C:** 1.40 max.

SERIES	END 1 CONNECTOR	END 2 CONNECTOR	OVERALL LENGTH
<b>RF047-A</b> = (1.2 mm) .047" overshield DIA 29 AWG millimeter wave cable  <b>RF086</b> = (2.18 mm) .086" overshield DIA 23 AWG millimeter wave cable  <b>RF085</b> = (2.16 mm) .085" overshield DIA 24 AWG millimeter wave cable  <b>RF23C</b> = MWC-2350CU-01 millimeter wave cable with copper foil shield	<b>-92SJ</b> = 2.92 mm Straight Jack  <b>-92SP</b> = 2.92 mm Straight Plug	<b>ALSO AVAILABLE</b>  1.35 mm, 1.85 mm, 2.40 mm, SMPM = RF047-A  1.85 mm, 2.40 mm, SMPM = RF086  2.40 mm = RF085  2.40 mm, SMPM = RF23C	<b>- "XXXX"</b> = Overall Length in millimeters  -0100 (100 mm) 3.94" minimum (RF047-A, RF085, RF086,)  -0152 (0152 mm) 5.984" minimum (RF23C)

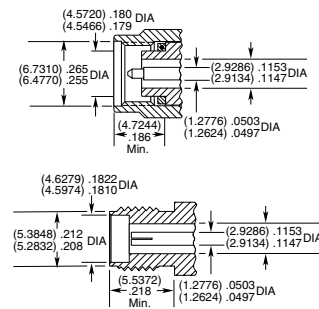
### 2.92 mm Cable Connectors

PRF92



CONNECTORS FOR INDUSTRY STANDARD CABLES	
PRF92-P-C-EE-405-SD	RG 405, .085, semi-rigid
PRF92-P-C-EE-085A-SD	.085, semi-rigid, 23AWG
PRF92-P-C-EP-160-SS	Semflex HP160, low loss flexible
PRF92-P-C-EP-150B-SS	IW 1501, low loss flexible
PRF92-P-C-EP-142-SS	Harbour LL142, low loss flexible
PRF92-J-C-EP-085-SS	Harbour SS405, flexible alternative to RG 405
PRF92-J-C-EP-085-BS	Harbour SS405, flexible alternative to RG 405
PRF92-P-C-EP-085-SS	Harbour SS405, flexible alternative to RG 405
PRF92-P-C-EE-402-SD	RG 402, .141, semi-rigid
PRF92-P-C-EP-190-SS	Semflex HP190, low loss flexible
PRF92-J-C-EP-160-SS	Semflex HP160, low loss flexible
PRF92-P-C-EP-120A-SS	Semflex HP120, low loss flexible
PRF92-P-C-EP-140-SS	Dynawave DF140, low loss flexible
PRF92-P-C-EP-047D-SS	.047, semi-rigid
PRF92-J-C-EP-047D-SS	.047, semi-rigid
PRF92-P-C-EP-150-SS	Dynawave DF150, low loss flexible
PRF92-P-C-EE-118-SD	Haverhill HC35004, .118, semi-rigid
PRF92-J-C-EP-402-SS	RG 402, .141, semi-rigid
PRF92-J-C-EP-047D-4S	.047, semi-rigid
PRF92-J-C-EP-405-4S	RG 405, .085, semi-rigid
PRF92-P-C-EE-405-SD	RG 405, .085, semi-rigid
PRF92-P-C-EP-086-SS	.086 Temp-Flex, low loss flexible
PRF92-P-C-EP-200-SS	Times Max Gain 200, low loss flexible

#### INTERFACE STANDARD



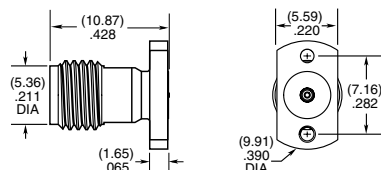
P-C = Cable Plug  
 J-P = Cable Jack  
 EE = Plating (50 μ" Gold center contact & outer contact)  
 EP = Plating (50 μ" Gold center contact, passivated outer contact)  
 SS = Straight, Solder Clamp  
 SD = Straight, Direct Solder  
 BS = Bulkhead, Solder Clamp  
 4S = 4-hole flange, Solder Clamp

### 2.92 mm Board Connectors

**Cable Mates:**  
 RF047-A, RF085, RF086, RF23C



292	GENDER	TYPE	PLATING	ORIENTATION	TERMINATION	OPTION	PACKAGING
	<b>-J</b> = Jack	<b>-P</b> = PCB Mount	<b>-EP</b> = 50 μ" (1.27 μm) Gold center contact, Passivated outer contact	<b>-ST</b> = Straight	<b>-CM</b> = Compression Mount Stripline  <b>-CMM</b> = Compression Mount Microstrip	<b>-1</b> = Without Screws  <b>-2</b> = With Screws	Leave blank for tray packaging  <b>-K</b> = Individually bagged



# SMPM TO 65 GHz

## SMPM Cable Assemblies

RF047-A, RF086, RF23C



### VSWR

**RF047-A:** 1.40 max.  
**RF086:** 1.40 max.  
**RF23C:** 1.40 max.

SERIES	END 1 CONNECTOR	END 2 CONNECTOR	OVERALL LENGTH
<b>RF047-A</b> = (1.2 mm) .047" overshield DIA 29 AWG millimeter cable  <b>RF086</b> = (2.18 mm) .086" overshield DIA 23 AWG millimeter cable  <b>RF23C</b> = MWC-2350CU-01 millimeter wave cable with copper foil shield	<b>-MOSP</b> = SMPM Straight Plug, Full Detent  <b>-MOSJ</b> = SMPM Straight Jack  <b>-MORJ</b> = SMPM Right-angle Jack (RF047-A only)  <b>-MOBJ</b> = SMPM Straight Bulkhead Jack (RF047-A only)	<b>-“XXXX”</b> = Overall Length in millimeters  -0100 (0100 mm) 3.94" minimum (RF047-A, RF086)  -0152 (0152 mm) 5.984" minimum (RF23C)	

### ALSO AVAILABLE

1.85 mm, 2.40 mm, 2.92 mm = RF086  
 1.35 mm, 1.85 mm, 2.40 mm,  
 2.92 mm = RF047-A  
 2.40 mm, 2.92 mm = RF23C

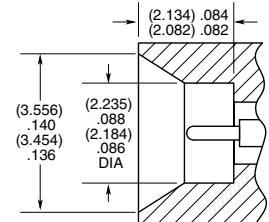
## SMPM Cable Connectors

PRFM0



CONNECTORS FOR INDUSTRY STANDARD CABLES	
PRFM0-J-C-EE-047A-BD	.047 Temp-Flex, low loss flexible, 29 AWG
PRFM0-J-C-EE-085-BD	Harbour SS405, flexible alternative to RG 405
PRFM0-J-C-EE-047A-RD	.047 Temp-Flex, low loss flexible, 29 AWG
PRFM0-J-C-EE-086-SD	.086 Temp-Flex, low loss flexible
PRFM0-J-C-EE-047B-SD	.047 Temp-Flex, low loss flexible, 28 AWG
PRFM0-P-C-HG-047A-SD	.047 Temp-Flex, low loss flexible, 29 AWG
PRFM0-J-C-HG-047A-SD	.047 Temp-Flex, low loss flexible, 29 AWG

### INTERFACE STANDARD (CATCHERS MITT)

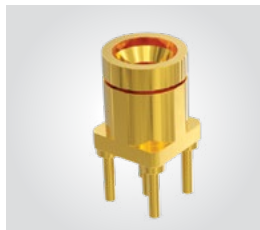


P-C = Cable Plug  
 J-C = Cable Jack  
 EE = Plating (50 μ" Gold center contact, & outer contact)  
 HG = Plating (30 μ" Gold center contact, 10 μ" Gold outer contact)  
 SD = Straight, Direct Solder  
 BD = Bulkhead, Direct Solder  
 RD = Right-angle, Direct Solder

## SMPM Board Connectors

SMPM-SM, SMPM-TH, SMPM-RA

**Cable Mates:**  
 RF047-A, RF086, RF23C

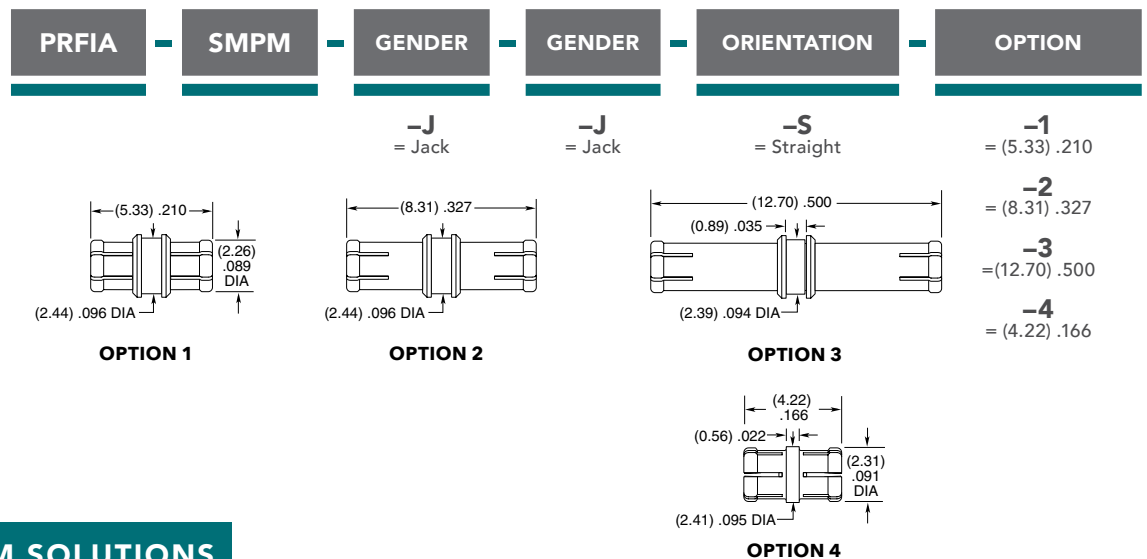


SMPM	GENDER	TYPE	PLATING	ORIENTATION	TERMINATION	1
	<b>-PF</b> = Full Detent  <b>-PS</b> = Smooth Bore  <b>-PC</b> = Catchers Mitt (-ST-TH only)	<b>-P</b> = PCB Mount	<b>-HG</b> = 30 μ" (0.76 μm) Gold center contact, 10 μ" (0.25 μm) Gold outer contact (-ST only)  <b>-HF</b> = 30 μ" (0.76 μm) Gold center contact, 3 μ" (0.08 μm) Gold outer contact (-RA only)  <b>-EE</b> = 50 μ" (1.27 μm) Gold center contact and outer body (-SM only)	<b>-ST</b> = Straight  <b>-RA</b> = Right-angle (-TH required)	<b>-EM</b> = Drop-in Edge Mount (-ST only)  <b>-TH</b> = Through-hole  <b>-SM</b> = Surface Mount (-ST only)	
	<p><b>-ST-SM-1</b></p>	<p><b>-ST-EM-1</b></p>	<p><b>-ST-TH-1</b></p>	<p><b>-RA-TH-1</b></p>		

## SMPM TO 65 GHz

### SMPM Bullet Adaptor PRFIA

Mates With:  
SMPM, GPPB



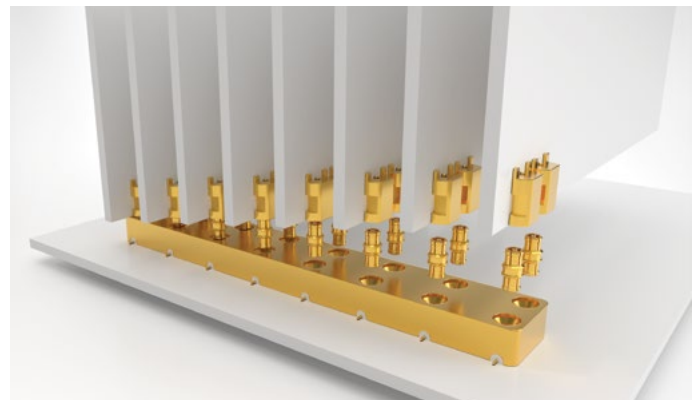
## GANGED SMPM SOLUTIONS

### BOARD-TO-BOARD GANGED, MULTI-POSITION SMPM BLOCKS

Series: GPPB  
Mates with: PRFIA

#### FEATURES

- High-density, space-saving design
- 8.33 mm (.328") pitch (3.56 mm (.140") pitch in development)
- Push-on interface with varying retention forces
- Bullet adaptors enable blind mate applications accommodating axial and radial misalignment
- Board height options: 4.22 mm (.166"), 5.33 mm (.210"), 8.31 mm (.327"), 12.70 mm (.500")

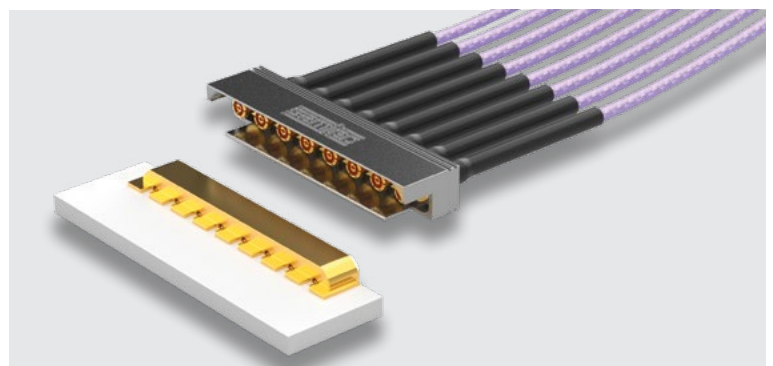


### CABLE-TO-BOARD GANGED, MULTI-POSITION SMPM CABLE ASSEMBLY

Cable Assembly: GC47  
Board Mate: GPPC

#### FEATURES

- High-density, space-saving design
- Pitch: 3.56 mm (.140")
- Push-on interface for quick installation
- .047 low-loss flexible microwave/millimeter wave cable



Applications include: 5G wireless, mmWave, military/defense, telecom, radar, test & measurement, applications that are space limited and require high operating frequency

## SMA TO 26.5 GHz

### SMA Cable Assemblies

RF23C, RF25S, RF402, RF405, RF180, RF280



#### VSWR

**RF23C:** 1.30 max.  
**RF25S:** 1.60 max.  
**RF402:** 1.50 max.  
**RF405:** 1.35 max.  
**RF180:** 1.35 max.  
**RF280:** 1.35 max.

Additional connector options available.  
 Contact RFGroup@samtec.com

SERIES	END 1 CONNECTOR	END 2 CONNECTOR	OVERALL LENGTH
<b>RF23C</b> = MCW-2350CU-01 millimeter wave cable with copper foil shield	<b>-01SP1*</b> = SMA Straight Plug		<b>-“XXXX”</b> = Overall Length in millimeters  -0100 (100 mm) 3.94" minimum
<b>RF402</b> = RG 402 (.141") 19 AWG semi-flexible microwave cable	<b>-01RP1*</b> = SMA Right-angle Plug (RF23C & RF25S not available)		
<b>RF405</b> = RG 405 (.086") 24 AWG semi-flexible microwave cable	<b>-01BJ1*</b> = SMA Bulkhead Jack (RF402 & RF405 not available)		
<b>RF180</b> = (4.52 mm) .178" overshield DIA, 16 AWG microwave cable	<b>-01SB</b> = Straight Bulkhead Jack, Sealed (RF23C only)		
<b>RF280</b> = (7 mm) .277" overshield DIA, 11 AWG microwave cable			

\*Remove last "1" from end connector when specifying RF23C, RF180 & RF280.

#### ALSO AVAILABLE

2.40 mm, 2.92mm, SMPM = RF23C  
 SMP = RF25S, RF405  
 TNCA, N Type = RF180  
 TNCA, N Type = RF280

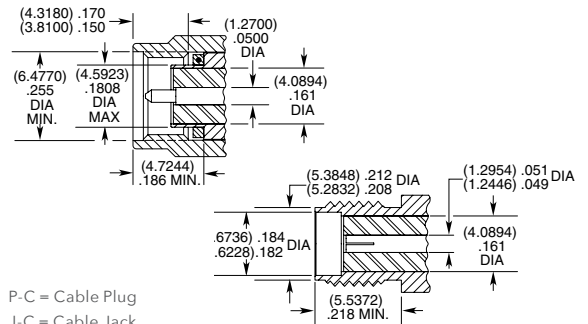
### SMA Cable Connectors

PRF01



CONNECTORS FOR INDUSTRY STANDARD CABLES	
PRF01-P-C-EP-120B-SS	IW 1201, low loss flexible
PRF01-P-C-EP-120-SS	Harbour LL120, low loss flexible
PRF01-P-C-EP-142-SS	Harbour LL142, low loss flexible
PRF01-P-C-EP-190-SS	Semflex HP190, low loss flexible
PRF01-P-C-EP-335-SS	Harbour LL335, low loss flexible
PRF01-P-C-EP-290-SS	Semflex LA290, low loss flexible
PRF01-P-C-EP-142A-SS	Harbour SB142, low loss flexible
PRF01-P-C-EP-142-RS	Harbour LL142, low loss flexible
PRF01-P-C-EP-190-RS	Semflex HP190, low loss flexible
PRF01-J-C-EP-142-SS	Harbour LL142, low loss flexible
PRF01-P-C-EP-141A-SS	Harbour SS402, flexible alternative to RG 402
PRF01-P-C-EP-160-RS	Semflex HP160, low loss flexible
PRF01-P-C-EP-305-SS	Semflex HP305, low loss flexible
PRF01-P-C-EP-335A-SS	Harbour LL335i, low loss flexible

#### INTERFACE STANDARD



P-C = Cable Plug  
 J-C = Cable Jack  
 EE = Plating (50 μ" Gold center contact & outer contact)  
 EP = Plating (50 μ" Gold center contact, passivated outer contact)  
 SS = Straight, Solder Clamp  
 RS = Right-angle, Solder Clamp

### SMA Board Connectors

SMA-TH, SMA-SM, SMA-MT, SMA-EM

**Cable Mates:**  
 RF23C, RF25S, RF402, RF405, RF180, RF280



SMA	GENDER	TYPE	PLATING	ORIENTATION	TERMINATION
	<b>-J</b> = Jack	<b>-P</b> = PCB Mount	<b>-H</b> = 30 μ" (0.76 μm) Gold center contact, 3 μ" (0.08 μm) Gold outer contact	<b>-ST</b> = Straight  <b>-RA</b> = Right-angle	<b>-TH1</b> = Through-hole  <b>-SM1</b> = Surface Mount (-GF-RA only)  <b>-EM1</b> = Edge Mount (-ST only)  <b>-EM3</b> = Drop-in Edge Mount (-ST only)  <b>-MT1</b> = Mixed Technology (-ST only)
			<b>-GF</b> = 10 μ" (0.25 μm) Gold center contact, 3 μ" (0.08 μm) Gold outer contact (-SM1 only)		

