

# P1CA-SAMSAM-SS141-24

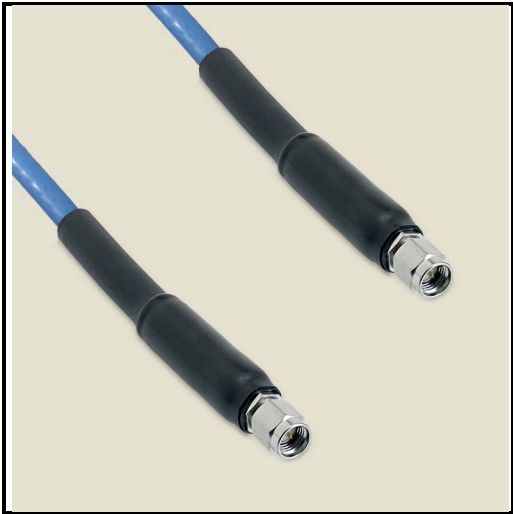
SMA Male to SMA Male test cable, SS141 flex, 24 inch. Frequency DC to 18 GHz.

## Product Features

P1CA-SAMSAM-SS141-24 is a 50 Ohm flexible RF test cable with SMA male connectors, 24 inch long.

Frequency is DC to 18 GHz with a max VSWR 1.25.

SS141 flex is a low loss, phase stable cable with an outer diameter of 0.16 inch.



## Electrical Specification: T<sub>Ambient</sub> = 25° C

| Parameter      | Frequency Range | Units  | Min | Typical | Max  | Notes |
|----------------|-----------------|--------|-----|---------|------|-------|
| VSWR           | DC to 1.0       | 1:     |     |         | 1.1  |       |
|                | 1.0 to 10.0     |        |     |         | 1.2  |       |
|                | 10.0 to 18.0    |        |     |         | 1.25 |       |
| Insertion Loss | DC to 1.0       | dB/ft. |     |         | 0.13 |       |
|                | 1.0 to 10.0     |        |     |         | 0.45 |       |
|                | 10.0 to 18.0    |        |     |         | 0.64 |       |

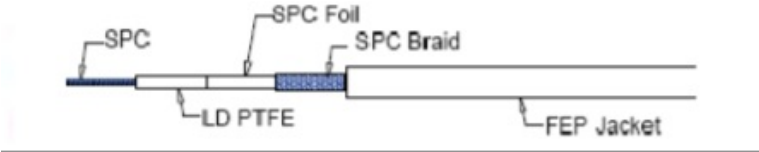
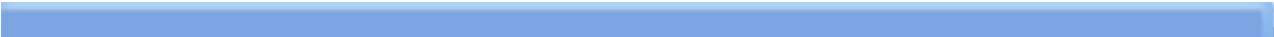
## Mechanical And Environmental Specifications:

| Parameter       | Description | Notes |
|-----------------|-------------|-------|
| Connector 1     | SMA Male    |       |
| Connector 2     | SMA Male    |       |
| Length          | 24.0        |       |
| RoHS Compliance | Yes         |       |

## Drawing

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## Graph

| DIMENSIONS                |                                |
|---------------------------|--------------------------------|
| Center Conductor Diameter |                                |
| (inch)                    | 0.04                           |
| (mm)                      | 1.02                           |
| Dielectric Diameter       |                                |
| (inch)                    | 0.116                          |
| (mm)                      | 2.95                           |
| Diameter Over Foil        |                                |
| (inch)                    | 0.124                          |
| (mm)                      | 3.14                           |
| Diameter over Braid       |                                |
| (inch)                    | 0.136                          |
| (mm)                      | 3.46                           |
| Jacket Diameter           |                                |
| (inch)                    | 0.163                          |
| (mm)                      | 4.14                           |
| MATERIAL SPECIFICATIONS   |                                |
| Jacket                    | FEP                            |
| Braid                     | Round silver plated copper     |
| Foil                      | Flat silver plated copper foil |
| Dielectric                | LD PTFE                        |
| Center Conductor          | Solid SPC                      |

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| ELECTRICAL CHARACTERISTICS      |             |         |
|---------------------------------|-------------|---------|
| Impedance                       | 50±2        |         |
| Capacitance (Nominal)           |             |         |
| (pF/ft)                         | 29.4        |         |
| (pF/m)                          | 96.4        |         |
| Velocity of Propagation (%)     | 78          |         |
| Cutt Off Frequency (GHz)        | 40          |         |
| Shielding Effectiveness         | > -110dB    |         |
| Max. Attenuation (dB/100Ft)     |             |         |
| Max Power (Watts)               |             |         |
| 400MHz                          | Attenuation | Power   |
| 1GHz                            | dB/100Ft    | dB/100M |
| 3GHz                            | 7           | 23      |
| 5GHz                            | 11          | 36      |
| 10GHz                           | 18.9        | 62      |
| 18GHz                           | 25.3        | 83      |
| 25GHz                           | 37.5        | 123     |
| 30GHz                           | 51.9        | 170     |
| 35GHz                           | 63.5        | 208     |
| 40GHz                           | 71.4        | 234     |
|                                 | 78.4        | 257     |
|                                 | 87.8        | 288     |
|                                 |             | 1100    |
|                                 |             | 550     |
|                                 |             | 350     |
|                                 |             | 245     |
|                                 |             | 140     |
|                                 |             | 87      |
|                                 |             | 75      |
|                                 |             | 68      |
|                                 |             | 61      |
|                                 |             | 56      |
| MECHANICAL CHARACTERISTICS      |             |         |
| Max. Operating Temperature (°C) | -55/ +200   |         |
| Min. Bend Radius                | Static      | Dynamic |
| (inch)                          | 0.48        | 0.8     |
| (mm)                            | 12          | 20      |
| Weight                          |             |         |
| (g/Ft)                          | 13.5        |         |
| (g/M)                           | 44.3        |         |

## Product Notes