

## Step Attenuators

PPC's Step Attenuators provide a fixed level of flat attenuation within the upstream frequencies only. Low value taps produce the majority of ingress and trouble calls within a typical HFC network. This is due to the lack of sufficient reverse attenuation found in higher-value taps. Applied directly to the tap port, PPC Step Attenuators provide unity gain with all cable modems and other critical reverse transmission products like digital voice and high-speed internet.

### Features

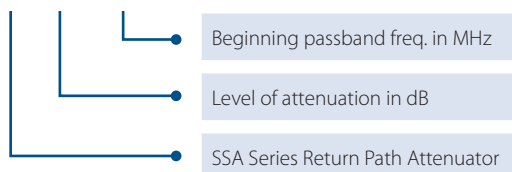
- Ingress Noise Attenuation: Attenuating the return path frequencies instructs the CMTS to raise the modem transmit level. This provides an improved signal to noise ratio; as the noise floor remains suppressed by the step attenuator.
- Micro-reflection Attenuation: Effectively reduces micro-reflections by two times the step attenuator value. Example: A 6 dB step attenuator will provide a 12 dB reduction in micro reflections.
- Dynamic Range Enhancement for FP Laser: Since the step attenuator reduces the ingress noise, the FP Laser performance margin is greatly improved, thereby reducing the risk for laser clipping.

### Specifications

|                         |   |
|-------------------------|---|
| Frequency               | 1,002 MHz minimum   |
| Impedance               | 75 Ohms   |
| Shielding Effectiveness | > 120 dB  |
| Dimensions              | Length = 1.65 in (4.19 cm)<br>Diameter = 0.5 in (1.27 cm) |
| Surge                   | 6 kV per SCTE IPS-TP-210                                  |

### Sample Part #:

**SSA12-54**



### Trap Specifications (Model Specific)

Model: **SSA12-54** Prep. By B.O. Date: 08/12/04  
Response: Sample Minimum operating frequency: 1 Ghz

| Marker # | Freq. Desc. | Freq. Mhz | Typ. Loss(dB) | Limits(dB) |
|----------|-------------|-----------|---------------|------------|
| 1        |             | 5.0       | 11.8          | 12±1.0     |
| 2        |             | 40.0      | 12.1          | 12±1.0     |
| 3        |             | 54.0      | 1.3           | 1.5 max    |
|          |             |           |               |            |
|          |             |           |               |            |
|          |             |           |               |            |

