

# MoCA BYPASS AMPLIFIERS

## Overview

### Issues and Resolution

### THE CONCERN

- ✓ In order to provide a full bandwidth bi-directional path between the in-house network and the MoCA enabled eMTA, a new class of bypass amplifier is required
- ✓ Current standard drop amplifiers and bypass amplifiers will not pass MoCA signals to the MoCA enabled eMTA

### Bypass Drop Amplifiers Without Integrated MoCA Filter

#### Issues

- ✓ MoCA signals from the TV outlets are blocked by the amplifier and can not pass around it to and from the eMTA port
- ✓ Maintains high port to port isolation between the output ports, increasing the loss for MoCA signaling within the home

### With Integrated MoCA Filter

#### Issues

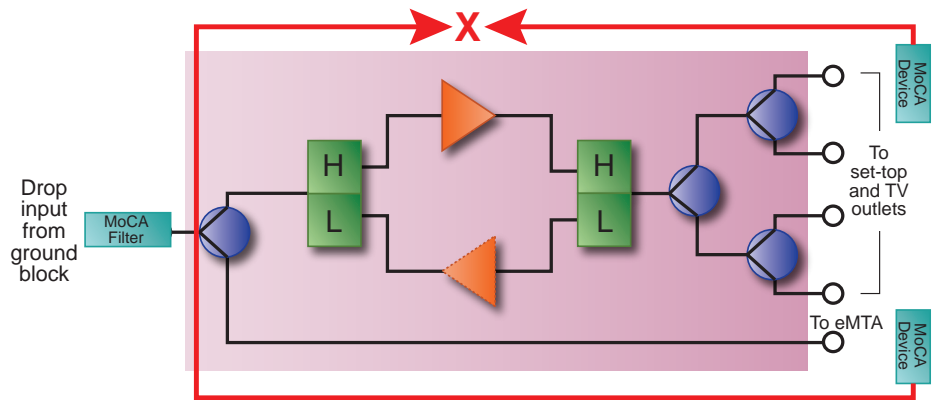
- ✓ Integrated MoCA filter alone does not provide a signal path to and from the eMTA port
- ✓ External splitter provides an additional potential failure point

### MoCA Bypass Drop Amplifiers

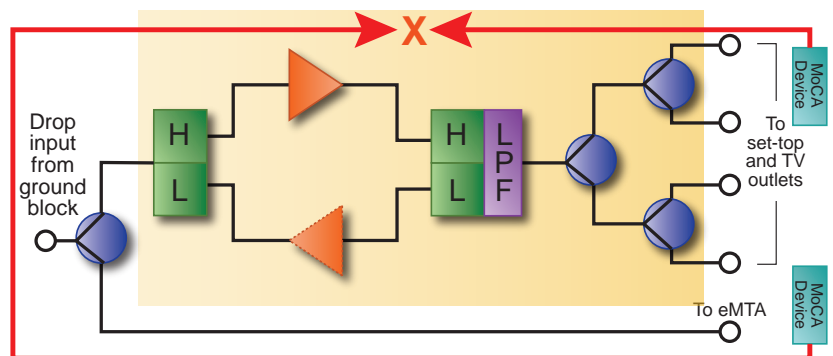
### With Integrated MoCA Filter and MoCA Bypass

#### Resolution

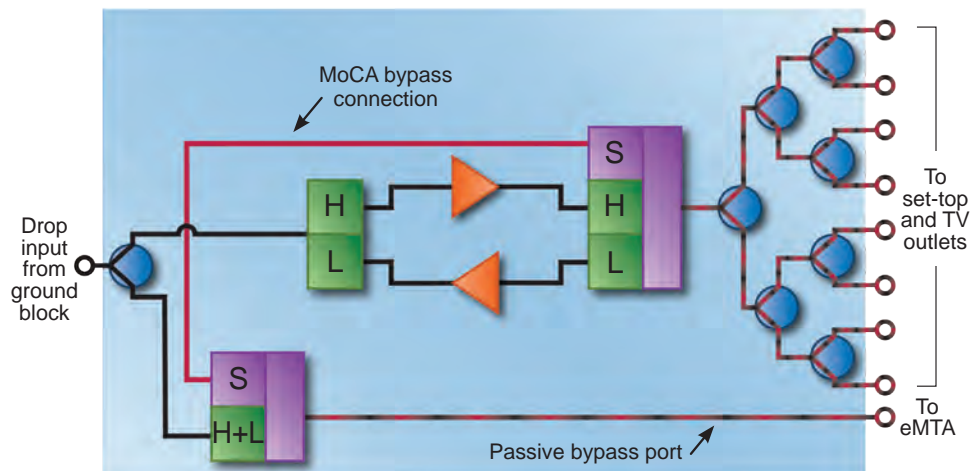
- ✓ Passive RF path via the internal splitter to the eMTA ensures connection to MSO network even in the event of power or amplifier failures
- ✓ MoCA triplex filter provides the bypass connection to enable in-home networking between eMTA, set top boxes, and in-home networking devices (gaming consoles, PCs, etc.)
- ✓ Integrated MoCA filter ensures MoCA signals (1125 to 1525 MHz) are constrained to the home network, and eliminates the need for an external MoCA filter at the point of entry
- ✓ Provides amplification to help overcome splitter and cable loss within the home
- ✓ Output port to port isolation optimized for MoCA networking



Passbands (MHz): H+L 5 to 1002; H 54 to 1002; L 5 to 42



Passbands (MHz): LPF 5 to 1525; H+L 5 to 1002; H 54 to 1002; L 5 to 42



Passbands (MHz): LPF 1125 to 1525; H+L 5 to 1002; H 54 to 1002; L 5 to 42