Line passives (splitters)

technetix

OSVCX-03, OSVCX-03-TP, OSVCX-03-P, OSVCX-03-PTP – vertically connected 3-way outdoor splitters

- 3-way outdoor splitters enabling vertical connections
- Power insertion port
- Optional test point lid
- Excellent RF and hum modulation performance
- Designed for extreme environmental conditions



Splitter without Test Points

Overview

The OSVCX series of 1.2GHz outdoor splitters includes 2-way, 3-way balanced, 3-way unbalanced and 4-way outdoor splitters.

The splitters are offered with the option of a test point lid. The test point lid allows a test probe to be used to check incoming/outgoing RF/power without removing the lid or disconnecting cables.

Providing surge protection on all ports, and excellent RF and hum modulation performance, the splitters feature 5/8"-24 NEF-female ports for input and output cable connection on the housing.

The splitters are surface mountable. To aid installation in street cabinets, all ports are on the bottom edge of the unit, pointing in the same direction.

Tested under extreme environmental conditions, the splitters are designed to operate near salt water, along busy highways and in very hot conditions.

OSVCX-03 / OSVCX-03-TP / OSVCX-03-P / OSVCX-03-PTP

Specifications

| | | MHz | 0SVCX-03 / 0 | SVCX-03-TP / 0SVCX-03-P / 0 | SVCX-03-PTP |
|---|-------------------------------|--|----------------------------------|--|--------------------------------|
| Insertion loss (dB) | | | Min | Тур | Max |
| | Output 1, 2 & 3 | 10 - 20 20 - 250 250 - 550 550 - 750 750 - 862 | | 5.8 2.8 5.5 5.8 6.2 | 7 6.5 6.5 7 7 7 |
| | | 862 - 1000 1000 - 1218 | | 6.5 7.8 | 7.5 8.5 |
| Return loss (dB) | All ports | 10 - 1218 | 16 | 20 | 0.0 |
| Isolation (dB) | All outputs | 10 - 20 20 - 150 150 - 550 550 - 750 750 - 1000 1000 - 1218 | 18 22 20 20 18 18 | 27 27 27 27 25 25 25 | |
| Screening effectiveness (dB) ³ | | 10-300 300-470 470-950 950-1218 | >95 >90 >85 >65 | | |
| Power passing (Amp AC/DC) | | 10 (15 on power insertion port) | | | |
| Fuse rating (Amp AC/DC) | | 10 (15 on power insertion port) | | | |
| Hum modulation (dB, typ) ¹ | All ports | -70 | | | |
| Surge class conformance ² | All ports | Combination wave 1.2/50 µs level 2 (1.0 kV) | | | |
| Material | Housing Connnector plating | Cast aluminium, liquid paint over Alocrom 1000 Tin-Nickel | | | |
| Impedance (ohm) | | 75 | | | |
| Dimensions (mm) | LxHxD | 175 x 102 x 45 (62 with test point lid) | | | |
| Equipment approval | | CE | | | |



Splitter with Test Points

Ordering information

| • | | |
|------------------|--|----------------|
| Item Name | | Article number |
| OSVCX-03 | 3-way splitter | 19006750 |
| OSVCX-03-TP | 3-way splitter with test point lid | 19007158 |
| OSVCX-03-P | 3-way splitter with power insertion port | 19006751 |
| OSVCX-03- PTP | 3-way splitter with power insertion port and test point lid | 19007159 |

Remarks

| | Measurements taken at room temperature | | |
|---|--|--|--|
| | All measurements taken without test probes connected and with blanking plugs fitted (when fitted with test port lid) | | |
| 1 | Average @ 10A Power Passing, 20MHz stepping from 10MHz to 1GHz and 50MHz stepping from 1GHz to 1.2GHz | | |
| 2 | 1kV combination wave, 1.2µs rise time, 50µs fall time on all ports | | |

3 According to BS EN 50083-2:2012

OSVCX-03 / OSVCX-03-TP / OSVCX-03-P / OSVCX-03-PTP

Mechanical & environmental specifications

| Performance parameter | | Details |
|-----------------------------------|--|---------------------------------------|
| Connectors | Input and Output | Female (5/8"-24NEF) |
| Water immersion | Tighten torque on connectors | 2.26 Nm (< 20 In-Lb) |
| (IP68) | Water head | 1m (3.28 ft) |
| | Duration | 168 hrs |
| | Observation: no water leak | No electrical degradation after dry |
| Temperature cycling with humidity | Temperature | +4°C to +60°C (+39.2°F to +140°F) |
| (EN 60068-2-30:2005) | Extreme temperature duration | 3 hrs |
| | Transient | 3 hrs |
| | Humidity | 95% RH |
| | Number of cycles | 20 |
| | Observation: no water leakage | No electrical degradation after dry |
| High temperature cycling | Temperature | +60°C (+140°F) |
| (EN 60068-2-2:2007) | Duration | 48 hrs |
| | Observation: no crack or damage | No electrical degradation after dry |
| Drop test | 75cm (29.5 in) high onto concrete floor or metal plate surface | Corner, edge and port |
| (EN 60068-2-32:1993, | Number of drop for each impact point | 1 |
| IEC 68-2-32:1975) | Observation: no crack on metal | No electrical performance degradation |
| Salt fog | Tighten torque on connectors | 2.26 Nm (< 20 In-Lb) |
| (MSTM-B-117) | Temperature | +35°C (+95°F) |
| | Salt percentage and acidity | 5% and pH7 |
| | Duration | 672 hrs |
| | Number of cycles | Continues |
| | Observation: no electrical performance degradation | No metal corrosion or salt incursion |
| WEEE (2002/96/EC) | Complete product | Marked with wheelie bin logo |
| RoHS (2002/95/EC) | Complete product | Complies to RoHS |
| Temperature | Operating temperature | -40°C to +60°C (-40°F to +140°F) |

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