



TSC

Series

1GHz 70/140dB EMI Digital Directional Couplers

- ▶ Digital-Ready Broadband 5-1000MHz frequency range
- ▶ Standard TSC-series feature epoxy-sealed back cover plates for effective EMI-RFI shielding >-90dB to reduce signal ingress
- ▶ TSC-SB-series feature a solder-back cover-plate to provide maximum EMI-RFI shielding >-140dB eliminating signal ingress and guarantee distortion free pictures
- ▶ High tap-to-output isolation provides spurious carrier protection and minimizes undesired channel interaction, reducing picture distortion
- ▶ Yellow-chromate plated TSC-series and tin-coated TSC-SB-series over zinc-alloy diecast housing ensures excellent ground bonding and long corrosion-free service life in indoor/outdoor applications
- ▶ High-performance printed board circuitry provides low intermodulation distortion to ensure excellent digital performance
- ▶ Capacitor coupling circuitry at all ports provide effective DC voltage blocking for improved hum modulation and intermodulation
- ▶ 1-inch centered 1/2" long precision machined F-connector threads ensure improved port-to-connector interface and accommodate external security devices
- ▶ Internal seizing pins provide improved connectivity to connector center lead
- ▶ TSC-series and TSCW-series designed for mounting in TruSpec's BP1 wall-plate for easy installation
- ▶ Performance tests conducted conforming with SCTE standards IPS TP-201, 202, 203, 403A, 406



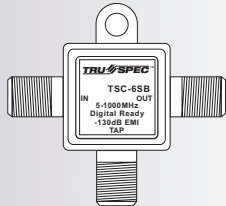
TSC Series

1GHz 70/140dB EMI Digital Directional Couplers

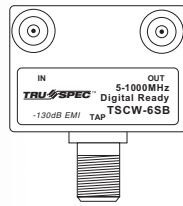
Manufactured to precise performance standards, TruSpec's TSC-series 1GHz professional-commercial grade CATV Directional Couplers provide superb performance unsurpassed by competitors' equivalent models. Applications range from residential to MDU installations in international and domestic cable distribution systems. These taps are used in applications requiring the bulk of the signal passing through one port while reduced signal passes from the tapped port. This feature ideally suits TSC-series taps for systems using looped or tree and branched architectures. Our advanced printed board circuitry includes special ferrite core material guaranteeing unsurpassed insertion loss, optimal isolation and return loss performance to 1GHz ensuring high-quality analog or digital signal transfer. All TSC-series F-port threads are precision machined, ensuring easy connector installation and removal, and improved port-to-connector interface. High retention internal seizing pins ensure excellent connectivity to connector center lead. Regular TSC-series back-plates are epoxy-sealed to provide superior RFI shielding >-70dB, while TSC-SB series directional couplers feature a solder-back cover-plate to provide the highest possible EMI-RFI shielding >-140dB eliminating signal ingress and providing a full environmental seal. Both TSC-series feature a thick tin coating over a zinc-alloy diecast housing to ensure excellent corrosion resistance. Each TSC-series directional coupler is fully tested at the factory and certified to SCTE standards.

TSC Series

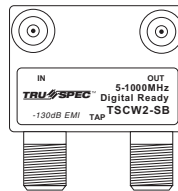
1GHz 70/140dB EMI Digital Directional Couplers



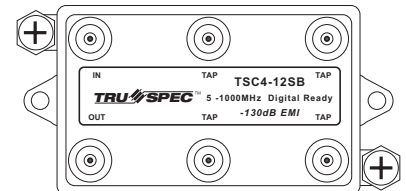
TSC
TSC-SB



TSCW
TSCW-SB



TSC2
TSC2-SB



TSC4
TSC4-SB

Specifications

TSC, TSC-SB, TSCW and TSCW-SB Series

Tap Loss ($\pm .6$ dB):	6,9,12,16,20,24,27,30 dB
Insertion Loss (In-Out):	1.3 dB Typical
Return Loss (Output):	22 dB Typical
Isolation (Tap-Out):	35 dB Typical
TSC Dimensions:	2.0"(L) x 1.9"(W) x 0.5"(H)
TSCW Dimensions:	2.0"(L) x 1.9"(W) x 0.5"(H)

TSC2 and TSC2-SB Series

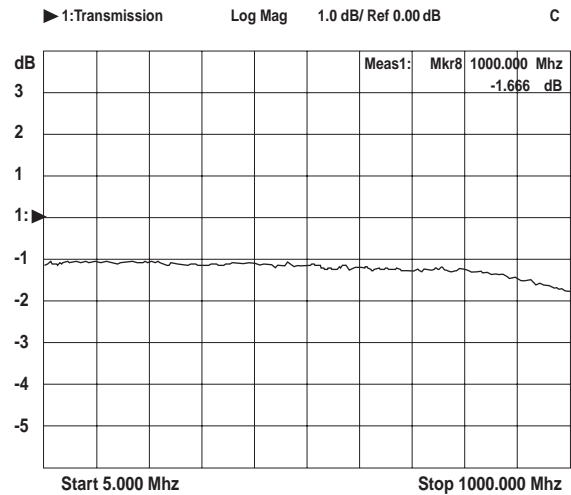
Tap Loss ($\pm .6$ dB):	6,9,12,16,20,24,27,30 dB
Insertion Loss (In-Out):	1.7 dB Typical
Return Loss (Output):	22 dB Typical
Isolation (Tap-Out):	35 dB Typical
Dimensions:	1.5"(L) x 1.7"(W) x 1.1"(H)

TSC4 and TSC4-SB Series

Tap Loss ($\pm .6$ dB):	8*,12,16,20,24,30 dB
Insertion Loss (In-Out):	1.5 dB Typical
Return Loss (Output):	24 dB Typical
Isolation (Tap-Out):	30 dB Typical
Dimensions:	3.0"(L) x 1.6"(W) x 1.1"(H)

NOTE: *8dB tap has terminated feed thru

INSERTION LOSS Typical



Ordering Information

TSC - <input type="text" value="dB Tap Value"/>	1-Port 70dB EMI Epoxy-Backed Tap Values: 6, 9, 12, 16, 20, 24, 27, 30dB	TSC2 - <input type="text" value="dB Tap Value"/>	2-Port 70dB EMI Epoxy-Backed Tap Values: 6,9, 12, 16, 20, 24, 27, 30dB
TSC - <input type="text" value="dB Tap Value"/> - SB	1-Port 130dB EMI Solder-Backed Backed Tap Values: 6, 9, 12, 16, 20, 24, 27, 30dB	TSC2 - <input type="text" value="dB Tap Value"/> - SB	2-Port 130dB EMI Solder-Backed Tap Values: 6,9, 12, 16, 20, 24, 27, 30dB
TSCW - <input type="text" value="dB Tap Value"/>	1-Port 70dB EMI Epoxy Wall-Plate Mount Tap Values: 6, 9, 12, 16, 20, 24, 27, 30dB	TSC4 - <input type="text" value="dB Tap Value"/>	4-Port 100dB EMI Epoxy-Backed Tap Values: 8, 12, 16, 20, 24, 30dB
TSCW - <input type="text" value="dB Tap Value"/> - SB	1-Port 130dB EMI Solder Wall-Plate Mount Tap Values: 6, 9, 12, 16, 20, 24, 27, 30dB	TSC4 - <input type="text" value="dB Tap Value"/> - SB	4-Port 130dB EMI Solder-Backed Tap Values: 8, 12, 16, 20, 24, 30dB