MERET *Optical Communications*

RF Product Accessories

Combiners, Splitters and Filters

Meret headend accessories and bandpass filters are engineered to assist users in building and configuring AM and FM CATV, CCTV and Broadband systems. All of these units are designed to integrate with virtually any Meret or other manufacturer's equipment.

8 Channel Combiner PN# 151127-8T

The Meret 8-channel combiner accepts 8 RF inputs and combines them for transmission over coaxial or fiber optic cable. The combiner provides uniform attenuation to all input signals and has high isolation between taps.

Specifications

Frequency Range	50 - 550 MHz
Return Loss (all ports)	>20 dB
Isolation (worst case)	30 dB @ 550 MHz
In/Out Impedance	75 ohms
Test Point	-20 dB ±1 dB
Input Loss	16 dB ±1 dB
Connectors	Type F
Size	12.4"L x 2.9"W x 1.25"H 315mmx74mmx32mm
Weight	1 lb. (.45 kg)

2-Way RF Hybrid Splitter PN# 960087-12

Specifications

Frequency Range	5 - 550 MHz
Return Loss	15 dB @ 550 MHz
Isolation (worst case)	30 dB @ 550 MHz
Impedance	75 ohms
Input Loss	3.5 dB
Connectors	Type F
Size	1.75"W x 3.5"L x 1 1/8"H
Weight	½ lb. (.2 kg)

8-Way RF Hybrid Splitter PN# 960087-18

Specifications

Frequency Range	5 - 550 MHz
Return Loss	15 dB @ 550 MHz
Isolation (worst case)	20 dB @ 550 MHz
Impedance	75 ohms
Input Loss	10 dB
Connectors	Type F
Size	2 7/8"W x 4 7/16"L x 1 1/8"H
Weight	½ lb. (.2 kg)

Phase Equalized Low Pass Filters

Meret LPF series filters are engineered for optimum performance in applications requiring video passband limiting. LPF units are ninth-order elliptic function filters with group delay equalization. The LPF is available in four models, suitable for most NTSC and PAL/SECAM applications.

The LPF is compact and light weight, allowing in-line use on short BNC coaxial leads. It can also be mounted on a 1 rack unit blank panel.

Specifications

All Model LPF EQ

Insertion Loss	<0.5 dB
Impedance	75 ohms, In/Out
Connector	Type BNC, In/Out
Temperature	0 - 50°C
Size	6" x 1.7" x 3" 152mmx43mmx76mm
Weight	3 lb. (1.4 kg)

Model LPF 4.0 EQ

This filter is used in NTSC operations where it is desirable to eliminate information above 4.2 MHz. It is widely used with the Meret VFMS-2000 FM systems to remove the 4.5 MHz aural subcarrier from the video signal at the demodulator output. It is also useful in limiting video energy from character generators which may cause interference with a 4.5 MHz subcarrier.

Response	25 Hz - 4.0 MHz ±1.0 dB
Attenuation	4.2 MHz <-2 dB
(Ref. 1.0 MHz)	4.5 MHz >-30 dB
	5.8 -100 MHz -35 dB
C/L Error (3.58)	<-0.2 dB
C/L Delay (3.58)	<50 nsec

Model LPF 4.5 EQ

The LPF 4.5 EQ is used to separate a composite video plus 4.5 MHz subcarrier from other subcarriers which are above 5.2 MHz. This filter is frequently used in microwave applications to separate video and audio signals from other, higher frequency subcarriers.

Response	25 Hz - 4.18 MHz ±1.0 dB
Attenuation	4.5 MHz <-0.5 dB
(Ref. 1.0 MHz)	5.2 MHz >-30 dB
	5.8 -100 MHz >-50 dB
C/L Error (3.58)	<-0.2 dB
C/L Delay (3.58)	<15 nsec

Model LPF 5.0 EQ

This filter is used in systems such as PAL or SECAM, where the video bandwidth is 5.0 MHz and requires separation from aural subcarriers above that frequency. The LPF 5.0 EQ removes all energy above 5.2 MHz. It is also useful in limiting video energy from character generators which may cause interference with a 5.5 MHz subcarrier.

Response	25 Hz - 5.1 MHz ±1.0 dB
Attenuation	5.0 MHz <-0.1 dB
(Ref. 1.0 MHz)	5.5 MHz >-40 dB
	5.8 -100 MHz -30 dB
C/L Error (4.43)	<-0.2 dB
C/L Delay (4.43)	<30 nsec

Model LPF 5.5 EQ

This filter rejects information above 6.4 MHz and will pass composite PAL and SECAM video with an aural subcarrier at 5.5 or 6.0 MHz.

Response	25 Hz - 5.4 MHz ±1.0 dB
Attenuation	5.0 MHz <-0.1 dB
(Ref. 1.0 MHz)	5.5 MHz <-0.5 dB
	5.8 -100 MHz -30 dB
C/L Error	<-0.2 dB
C/L Delay	<15 nsec

Specifications are subject to change without notice.