OCEAN POWER F7527QJ, Bridging Amplifier



Specifications:

Suitable for trunk and branch trunk amplification in single-way CATV system;

With a main output port and two bridging output port, used for trunk branching and building amplification;

Using double plug-in power module (made by PHILIPS or MOTOROLA) to make upgrade easy;

Manual gain control and two degrees slope control;

Provide two power supply method, centralized (AC30-60V) or individual(AC220V);

Waterproof and dustproof design, fast heat dissipation and fine screening characteristic;

Plug-in temperature compensator for selection;

High capability to price ratio;

Dimension (mm): 265 x 200 x 105

Parameter:

Parameter	F5524QJ		F5527QJ		F7524QJ		F7527QJ	
Bandwidth(MHz)	45-550			45-750				
Outroot Don't	Trunk	Bridge	Trunk	Bridge	Trunk	Bridge	Trunk	Bridge
Output Port	Port	Port	Port	Port	Port	Port	Port	Port
Nominal Gain (dB)	24	27	27	30	24	27	27	30
Flatness In Band(dB)	± 0.5 ± 0.75				.75			
Nominal Input Level(dBµV)	72							
Nominal Output Level(dBµV)	96	99	99	102	96	99	99	102
Gain Adjustment Range(dB)	0-18							
Plug-in Fixed Equalizer(dB)	6, 9, 12, 15, or specified by user							
Plug-in Adjusted Equalizer(dB)	0-18							
C/CSO(dB)	-68	-65	-68	-65	-67	-64	-67	-64
C/CTB(dB)	-71	-68	-71	-68	-70	-67	-70	-67
Noise Figure(dB)	<8.5							
Return Loss (dB)	>16 >16(45-550MHz) >14(550-73				750MHz)			
Input,Output Impedance(ohm)	75							
Gain Drift (dB)	±1(-25-+55°C)							
Supply Voltage (V)	AC30-60 or AC220±10%							
Thunderstroke Immunity(kV)	5(10-700μs)							

The brief introduction of QJ[#] series trunk amplifier:

□. Specifications:

This type of series trunk amplifier suitable for amplification of exurban connective network trunk system \square branch-trunk of CATV system & power distribution amplification. Using imported power hybrid design structure. It is in good characteristics and reliability, high power output, low noise figure and fast heat-sinking characteristics, etc.

□. Parameter:

Parameter TYPE	Frequency range □ MHZ □	Max. output Level □dBμV□	Working Gain □dB□		Flatness in Band □dB□	Gain adjustment □dB□	Slope adjustment (dB)	Noise figure □dB□
JS-F□□24QJ	45-550/750	122	T	24	±0.5/±0.75	0□15	3□18	≤8
		117	В	27	±0.75/±1.0	0013		
		122	T	27	±0.5/±0.75		3□18	≤8
JS-F□□27QJ 4.	45-550/750	117	В	30	±0.75/±1.0	0□15		
JS-F□□30QJ	45-550/750	122	T	30	±0.5/±0.75	0□15	3□18	≤8
35 1 2230Q3		117	В	33	±0.75/±1.0	0013		

^{*} T means trunk output port; B means bridge output port.

Purchase noting:

□. Provide two selections of power supply method, centralized 60V or separated 220V.
\Box . \Box means that 55 or 75, mention 550MHz or 750MHz.
□.Two degrees slope control.
Provide 6, 9, 12, 15dB changeless equalizer for selection.

\Box . \Box sing notice:

1. Application of the amplifier in 60V centralized power supply:

- ①. When using the infeed back electric power, the user must select the coaxial-cable with fine thick screening body, in order to fall down the power loss across the cable.
- ②. According to the parameter of the products, user can confirm the progressions of the series-wound amplifiers.
- ③. The power suppliers must have the fine screening and isolated characteristics, in order to prevent some kinds of interferential signal from the power supply system.
- 4. Forbid debugging until the system is grounded firmly.
- ⑤. All the connect point in the feedback current circuit of the Alternating current power must be firm and reliable, in order to prevent the damage of connection point.
- 6. If the input alternating voltage level of any stage amplification cannot meet the requirement of the system, you may adjust the voltage plug-in-unit(30V,40V,50V,60V) until you get the correct parameter.
- (7). The power feed of D2 60V:

The switch **K1** can be used to supply or cut off the power of **IN** port.

The switch **K2** can be used to supply or cut off the power of **OUT** port.

The switch **K3** can be used to supply or cut off the power of **OUT1** port.

The switch **K4** can be used to supply or cut off the power of **OUT2** port.

2. Application of the amplifier in 220V separate power supply:

①. Before using the amplifier, please test the alternating voltage and make it accord with the AC220V \pm 10% level.

- ②. Before electrifying, the user must test the isolate resistance between input alternating current loop and the crust body, in order to prevent short circuit and creepage.
- ③. Carefully confirm the firm earthing.

3. The step of debugging:

- ①. Open the crust body and then you can see the circuit structure: (the figure of the amplifier)
- ②. Fix the amplifier to the correct place, then you can electrify the amplifier to have a test. If something wrong happen, cut off the power immediately and find the mistake.
- ③. Testing the input voltage level with field strength meter, notice that the parameter must meet the design requirement 74±4dBµv.
- ④. The output voltage level debugging: before the debugging, insert the corresponding **EQ**(plug-in equalizer), then adjust manually the **MGC**(manual gain control) and **MSC**(manual slope control), until making the output voltage level and slope meet the project design requirement.
- ⑤. According to the amplifier in 60V power supply, user may dial the switch to select the corresponding (30V, 40V, 50V, 60V) place.
- \Box . Notes:
- ①. Before debugging, the testing instrument must be equipped with isolated equipment.
- ②. After debugging, you must fix the screw tightly, prevent to filter water or dust, and place the amplifier escape the powerful magnetic field and powerful interferential field.

Attach of the amplifier:

- •. 0dB equalizer
 - •. 0-18dB adjustable equalizer

