

VSA600 C Series Residential Amplifiers

Model:	VSA - 601 C	VSA - 604 C	VSA - 608 C	VSPI - 600
Number of Output Ports	1 Port	4 Port	8 Port	Power Inserter
Surge Protection	Combination Wave, 6kV/3kA per IEEE C62.41-1991 Cat B3 on all RF ports except remote powering ports which have ring wave, 6kV/200A per IEEE C62.41-1991 Cat. A3			
Mechanical F-Port Seal (psi)	30	30	30	N/A
Power Consumption (W)	2	2	2	N/A
Passing Current (mA)	N/A	N/A	N/A	500
Rated Operating Temperature (°F)	-40 to 160	-40 to 160	-40 to 160	-40 to 160
Housing Dimensions (H" x W" x L")	1.0 x 3.5 x 2.5	1.0 x 3.5 x 2.5	1.0 x 3.5 x 3.45	0.6 x 2.3 x 1.8
Weight (oz)	10	10	13.8	1.9
FORWARD PATH SPECIFICATIONS				
Pass Band (MHz)	52-1000	52-1000	52-1000	5-1000
Gain (Input to Output) (dB) (typ)	15	8.0	4.0	-0.75
Flatness (dB)	0.75	1.0	1.0	0.25
Return Loss (dB) (min)	20	20	20	20
Noise Figure				
54-860 MHz (dB) (max)	3.5	3.5	3.5	N/A
860-1000 MHz (dB) (max)	3.8	3.8	3.8	N/A
Channel Loading (NTSC)	79 analog and 33 digital			
Reference Input Level (dBmV)	10	10	10	N/A
Composite Triple Beat (dBc)	<-75	<-75	<-75	N/A
Composite Second Order (dBc)	<-61	<-61	<-61	N/A
Cross Modulation (dBc)	<-75	<-75	<-75	N/A
Hum Modulation (dBc)	<-80	<-80	<-80	N/A
Isolation				
Input to DC Port (dB) (min)	>60	>60	>60	N/A
Output to Output 5-15 MHz (dB)	N/A	20	20	N/A
Output to Output 15-40 MHz (dB)	N/A	30	30	N/A
Output to Output 52-1000 MHz (dB)	N/A	20	20	N/A
Group Delay (3.58 MHz span)				
Ch 2-5 (ns)	<15	<15	<15	N/A
Ch 5 & up (ns)	<5	<5	<5	N/A
RFI Shielding (dB)	> 110	> 110	> 110	>110
REVERSE PATH SPECIFICATIONS				
Pass Band (MHz)	5-42	5-42	5-42	5-1000
Return Path Insertion Loss (dB) (typ)	-0.8	-8.0	-11.5	-0.75
Flatness (dB)	0.5	0.5	0.5	0.25
Return Loss (dB) (min)	20	20	20	20
Group Delay (1.5 MHz span)				
5-7 & 40-42 MHz (ns)	<20	<20	20	N/A
7-42 MHz (ns)	<10	<10	10	N/A
Second Harmonic**	N/A	-100dBc	-100dBc	N/A

**Measured at 74 MHz on Output with 37 MHz dBmV inserted on Output after 5x ring wave surge