House amplifiers
High power amplifiers

- switchable by 1 dB step, noninterruptable gain & slope regulators ensure high stability of operation
- switchable forward path gain, passive or active return path, ingress blocking filter
- input attenuator for active return path
- test points: input - bi-directional, output - directional
- die-cast housing

HA209
local powered; without return path

HA209R30, HA209R65
local powered; with return path 30 MHz and 65 MHz

HD209
remote powered; without return path

HD209R30, HD209R65
remote powered; with return path 30 MHz and 65 MHz

Technical specifications

TYPE	HA209	HA209R30	HA209R65	HD209	HD209R30	HD209R65
Ordering number	10578	10579	10580	10581	10582	10583
Forward path						
Frequency range	47-1002 MHz		87-1002 MHz	47-1002 MHz		87-1002 MHz
Gain, switchable *	27/36 dB					
Gain adjustment	15 dB by 1 dB step					
Slope adjustment	15 dB by 1 dB step					
Interstage equalizer	-6/-3/0 dB					
Flatness*	±0.5 dB	±0.75 dB		±0.5 dB	±0.75 dB	
Input and output return loss	≥ 14 dB at 40 MHz; -1.5 dB/oct., but not less 10 dB					
Output level CTB,CSO (EN50083-3)**	109 dBμV					
Noise figure	≤ 6.5 dB					
Test points	-20 dB					
Return path						
Frequency range	-	5 - 30 MHz	5-65 MHz	-	5 - 30 MHz	5-65 MHz
Gain, switchable	-	27/-3 dB		-	27/-3 dB	
Gain adjustment	-	15 dB by 1 dB step		-	15 dB by 1 dB step	
Ingress blocking filter attenuation	-	>20 dB up to 13.5 MHz; <1.5 dB from 18 MHz		-	>20 dB up to 13.5 MHz; <1.5 dB from 18 MHz	
Input attenuator	-	-10/0 dB		-	-10/0 dB	
Output equalizer	-	-6/-3/0 dB		-	-6/-3/0 dB	
Flatness	-	±0.75 dB		-	±0.75 dB	
Return loss	-	> 14 dB		-	> 14 dB	
Noise figure	-	5 dB (active, 0 dB input attenuator)		-	5 dB (active, 0 dB input attenuator)	
Maximal output level IMD3=60 dB (DIN45004B)	-	115 dBμV (active)		-	115 dBμV (active)	
General						
Power consumption	230 V~ 50/60 Hz 6 W	230 V~ 50/60 Hz 7 W		24-65 V~50/60 Hz 6 W	24-65 V~ 50/60 Hz 7 W	
Operating temperature range	-20° ÷ +50° C					
Dimensions/Weight (packed)	185x91x47 mm/0.7 kg					

* for amplifiers with return path measured 10 MHz after the starting frequency of forward path
** with 6 dB interstage equalizer