

Amplifier MKV-822-0200

MTS-No.: R54.01.0200

Short description

To amplify low signal level in the EMC measurement technology and to increase the antenna ranges this low noise amplifier has been developed by MTS. The wide-band amplifier particularly has been designed for the MTS antenna MTA-300-3000 and can be connected to these directly.



Technical data

1 RF-specifications:

1.1 Impedance	50 Ω	
1.2 Frequency range	30 MHz - 3 GHz	
1.3 Input power	-15 dBm max.	
1.4 Gain	>16 dB	
1.5 Noise figure	30 MHz - 3,3 GHz	<2,5 dB
	3,3 GHz - 4,0 GHz	<2,7 dB
1.6 VSWR In	30 MHz - 3 GHz	<1 : 1,1
	>3 GHz	<1 : 1,7
1.7 VSWR Out	30 MHz - 3 GHz	<1 : 1,1
	>3 GHz	<1 : 1,7
1.8 1 dB compression	1 GHz	5,3 dBm
	2 GHz	6,3 dBm
	3 GHz	5,0 dBm

2 Connectors:

2.1 RF-input	N male
2.2 RF-output	N female
2.3 Voltage	12 V DC-feedthrough filter and grounding pin

3 General specifications:

3.1 Internal voltage	12 V DC
3.2 Power consumption	100 mA max.

3.3 Operating temperature	+5 °C to +60 °C
3.4 Storage temperature	-30 °C to +70 °C
3.5 Reference temperature of specifications	+25 °C
3.6 Dimensions (without connections) (LxWxH)	77 mm x 51 mm x 22 mm
3.7 Case style	Milled aluminium enclosure
3.8 Colour	Alloy chromit
3.9 Weight	Approx. 0,1 kg

4 Delivered parts:

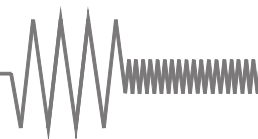
MKV-822-0200
CD-ROM with correction values (S21), connector pin assignment and technical specifications

5 Comments:

Warranty	12 months
RoHS compliant	Yes

6 Recommended accessories:

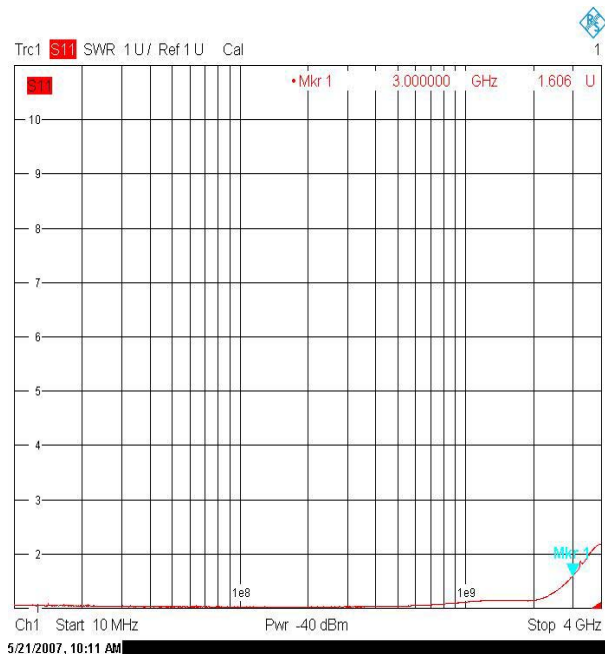
Measurement cable assemblies
Antennas



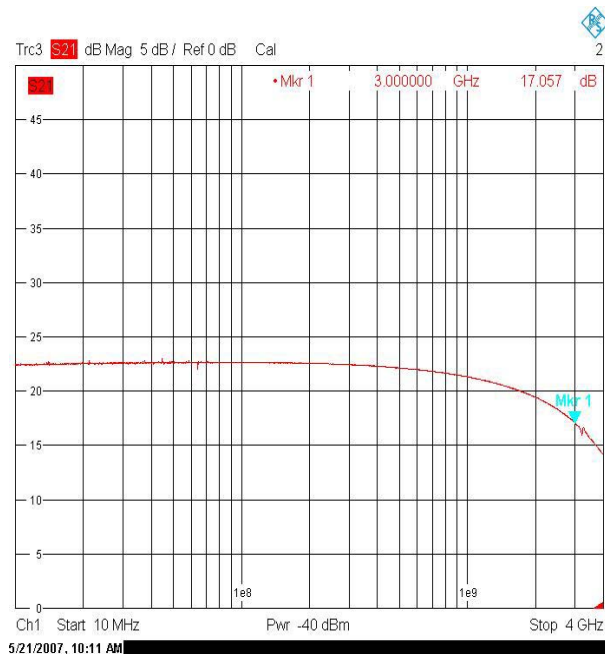
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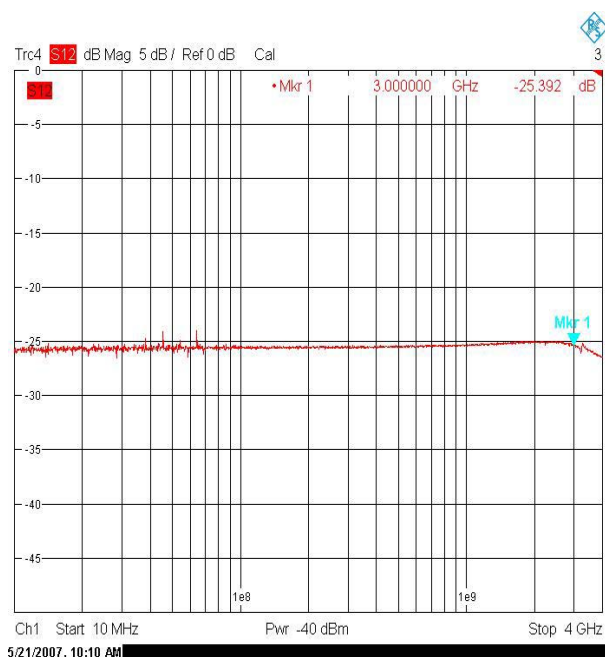
VSWR in



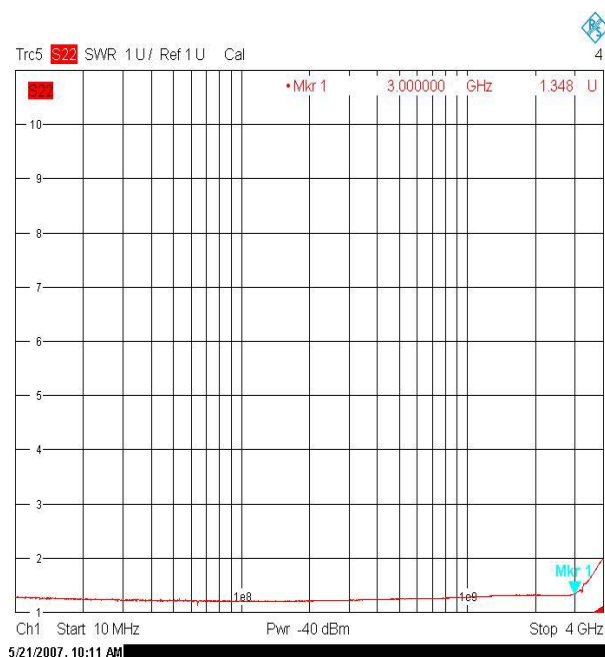
Gain

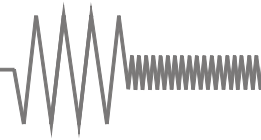


Isolation



VSWR out





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	VSWR in	Isolation	Gain	VSWR out		
Frequenz	S11	S12	S21	S22	IP-3	Noise
(MHz)	(U)	(dB)	(dB)	(U)	Output	Figure
					(dBm)	(dB)
100	1,03	-25,59	22,70	1,22	25,39	2,37
200	1,03	-25,56	22,62	1,22	25,42	2,29
300	1,03	-25,54	22,48	1,24	25,44	2,29
400	1,03	-25,59	22,35	1,24	25,00	2,43
500	1,03	-25,64	22,19	1,25	24,87	2,16
600	1,04	-25,46	22,03	1,25	24,76	2,16
700	1,05	-25,46	21,86	1,25	25,10	2,18
800	1,07	-25,46	21,69	1,26	25,31	2,22
900	1,09	-25,43	21,54	1,26	25,32	2,42
1000	1,11	-25,40	21,35	1,26	25,34	2,32
1100	1,12	-25,29	21,18	1,27	25,17	2,36
1200	1,14	-25,35	21,00	1,28	25,07	2,29
1300	1,14	-25,34	20,81	1,29	24,95	2,23
1400	1,15	-25,29	20,64	1,29	24,75	2,22
1500	1,14	-25,30	20,44	1,29	24,81	2,17
1600	1,14	-25,31	20,22	1,29	24,96	2,19
1700	1,13	-25,32	20,04	1,29	25,20	2,19
1800	1,12	-25,19	19,85	1,29	25,45	2,19
1900	1,12	-25,20	19,66	1,29	25,46	2,26
2000	1,12	-25,17	19,46	1,30	25,50	2,32
2100	1,13	-25,23	19,26	1,29	25,45	2,35
2200	1,13	-25,13	18,97	1,29	25,44	2,39
2300	1,14	-25,14	18,78	1,29	25,39	2,39
2400	1,17	-25,27	18,53	1,28	25,35	2,40
2500	1,22	-25,12	18,30	1,29	25,30	2,38
2600	1,29	-25,30	18,10	1,29	25,24	2,36
2700	1,35	-25,36	17,85	1,29	25,27	2,38
2800	1,41	-25,23	17,61	1,30	25,30	2,41
2900	1,48	-25,50	17,38	1,32	25,33	2,42
3000	1,55	-25,62	17,12	1,34	25,48	2,43
3100	1,60	-25,79	16,83	1,38	25,46	2,44
3200	1,64	-26,30	16,02	1,38	25,44	2,44
3300	1,66	-25,38	16,44	1,56	25,41	2,49
3400	1,80	-25,92	15,83	1,57	25,38	2,54
3500	1,93	-26,15	15,65	1,64	25,25	2,61
3600	2,01	-26,37	15,29	1,71	25,02	2,69
3700	2,09	-26,37	15,07	1,80	24,82	2,69
3800	2,15	-26,64	14,77	1,88	24,73	2,70
3900	2,19	-26,76	14,48	1,97	24,69	2,70
4000	2,20	-26,82	14,23	2,03	24,70	2,70