

MLE300SALGDNA-4XX.25 Low Gain Dual Node Amplifier 5-40/54-1002 MHz

Module only specifications unless noted

Standard RF Specifications				
Parameter	Units	Forward	Reverse	Notes
Pass Band	MHz	54-1002	5-40	
Amplifier Type	-	GaAsFET PD	Silicon	
Flatness	dB	+/-0.75	+/-0.5	1,2
Minimum Full Gain (AGC mode)	dB	31.1		1
Main and Aux 1 Ports			18.7	
Aux 2 Port			21.7	
Operational Gain (MGC mode)	dB	27		3,4
Main and Aux 1 Ports			17.7	
Aux 2 Port			20.7	
AGC Range @ 1002 MHz	dB	+3.1/-4.0	-	
Return Loss (typical)	dB	-16	-16	5
Noise Figure @	dB		12.5	6
54 MHz		6.5		
1002 MHz		6.0		
Test Points	dB	-30 (+/-1.0)	-30 (+/-1.0)	5
		Status Monitor -30 (+/-1.5)		
Loop Isolation (40-54 MHz)	dB	Better than -35		6
Hum Modulation @ 15 A	dBc	-60 (54-870 MHz) -58 (870-1002 MHz)	-60 (5-12 MHz) -65 (12-40 MHz)	
AC Bypass Current (continuous)	A	15		
DC Current Draw (maximum)	A	1.35		
Distortion Measurements @ Rated Level				
Reference Frequencies	MHz	1002 / 870 / 750 / 550 / 54	T7-T12	
Output Levels	dBmV	50 / 49.1 / 47.5 / 45.5 / 37	35 (flat out)	
Channel Loading	NTSC	130	6	7
CTB	dBc	-63	-90	1
CSO (high side)	dBc	-74	-85	1
Cross Modulation	dBc	-60	-78	1

Notes:

1. Measured using an Interstage EQ = MLE1000-14, Aux 1/2 Interstage Pad = MPBNP10A-00.5, and 0 dB plug-ins for all remaining forward and return locations.
2. Measured with 17 dB of simulated cable.
3. Includes a 1 dB loss from the Input EQ and a 1 dB loss from the Return EQ.
4. When in MGC Mode, ensure there is at least 3.1 dB of reserved gain.
5. Measured using an Input EQ = MLE1000-15, Interstage EQ = MLE1000-14, Aux 1/2 Interstage Pad = MPBNP10A-00.5, and 0 dB plug-ins for all remaining forward and return locations.
6. Measured using an Aux 1/2 Interstage Pad = MPBNP10A-00.5, no forward/return roll correctors, and 0 dB plug-ins for all remaining forward and return locations.
7. Distortions with 130 NTSC analog channels (no digital) and in MGC mode.

Accessories	
Factory Installed Plug-ins	Plug-in Series
Diplex Filters (not accessible thru the cover, field upgradeable)	MLE300XDF-01
Forward Roll Corrector (not accessible thru the cover, field upgradeable)	MLE1202FRC
Response EQ (Debumper) = 18 AWG buss wire jumper	6EDB
Interstage EQ = MLE1000-14	MLE1000
AGC/MGC Module (available pilot frequencies: 427.25 and 499.25 MHz)	MLE300SA-AGC-4XX.25
Interstage Pad = MPBNP10A-00	MPBNP10A
Main Interstage Pad = MPBNP10A-00	MPBNP10A
Aux 1/2 Interstage Pad = MPBNP10A-00.5	MPBNP10A
Aux 1/2 Signal Director = MPBNP10A-00	MPBNP10A
Main Return Input Pad = MPBNP10A-00	MPBNP10A
Aux 1 Return Input Pad = MPBNP10A-00	MPBNP10A
Aux 2 Return Input Pad = MPBNP10A-03	MPBNP10A
Return Roll Corrector (not accessible thru the cover, field upgradeable)	MLE1202RRC
Low Pass Filter (not accessible thru the cover, field upgradeable)	MLERF100104
FUSE 1, FUSE 2, FUSE 3, FUSE 4 = 25 Amp Auto Fuse	0189940-25
230 V AC Crowbar Surge Protector	MLE300SATCB
Required Plug-ins	Plug-in Series
Input Pad	MPBNP10A
Input Equalizer	MLE1000
Return Output Pad	MPBNP10A
Return Equalizer	MPBN6REF42
Optional Plug-ins	Plug-in Series
Plug-in Pads for the AGC/MGC Module	MGIP
2-Way Splitter	0911055-801
DC-8 Directional Coupler	2501158
DC-12 Directional Coupler	2501159
Plug-in diplex filter options include 40/51, 42/54, 55/70, 65/86 and 85/105 MHz.	-

System Amplifier Housing Upgrade Instructions	
Original System Amplifier Housing Specifications	
Type of Housing	Amp Capacity
SA II, SA II+	10 Amps
Upgrade Instructions:	
<ol style="list-style-type: none"> If the current seizure screws and anvils are "blue" in color, the System Amplifier housing has already been upgraded and nothing needs to be done. If the current seizure screws and anvils are not "blue" in color, replace the seizure screws and anvils with SA part number 548775. 	
Type of Housing	Amp Capacity
SA III	15 Amps
Upgrade Instructions: Nothing needs to be done.	
Upgraded System Amplifier Housing Specifications	
Type of Housing	Amp Capacity
SA II, SA II+	15 Amps