SYSTEMAX MAINLINE INCORPORATED

SPECIFICATION SHEET

MLE300SALE-4**.25
Line Extender Module
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	41.1	20.8	2
Operational Gain (MGC mode)	dB	37	19.8	3,4
AGC Range @ 1002 MHz	dB	+3.1/-4.0	-	
Return Loss (typical)	dB	-16	-16	5
Noise Figure	dB	7	6.5	6
Test Points	dB	-30 (+/-1.0)	-30 (+/-1.0)	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)	mA	950		
Distortion Measurements @ Rated Level				
Reference Frequencies	MHz	1002 / 870 / 750 / 550 / 54	T7-T12	
Output Levels	dBmV	49.5 / 48.2 / 47.4 / 45.3 / 35.7	35 (flat out)	
Channel Loading	NTSC	130	6	7
CTB	dBc	-64	-87	2
CSO (high side)	dBc	-69	-80	2
Cross Modulation	dBc	-60	-77	2,8

Notes:

1. Measured with 17 dB of simulated cable.
2. Measured using an Interstage EQ = MFA150-0 and 0 dB plug-ins for all remaining forward and return locations.
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 = MFA150-0, Interstage EQ = MFA150-0, and 0 dB plug-ins for all remaining forward and return locations.
6. Measured using 0 dB plug-ins for all forward and return locations.
7. Distortions in MGC mode with 130 NTSC analog channels (no digital).
8. X-mod (@ 15.75 KHz) specified using 100% synchronous modulation.

Accessories

Factory Installed Plug-ins	Plug-in Series
Diplex Filters (not accessible thru the cover, field upgradeable)	MLE300XDF-01
Interstage Pad = MP000-0	MP***-0
Interstage EQ = MFA150-0	MFA***-0
AGC/MGC Module (available pilot frequencies: 427.25 and 499.25 MHz)	MAA4**250
Return Input Pad = MP000-0	MP***-0
Return Roll Corrector (not accessible thru the cover, field upgradeable)	MLE1202RRC
AC Power Pass Jumpers (In/Out)	CJT002
230 V AC Crowbar Surge Protector	MLE300SATCB
Required Plug-ins	**Plug-in Series**
Input Pad	MP***-0
Input EQ	MFA***-0
Return Output Pad	MP***-0
Return EQ	MRN***-0
Optional Plug-ins	**Plug-in Series**
Forward Roll Corrector (not accessible thru the cover, field upgradeable)	MLE1202FRC
Plug-in Pads for the AGC/MGC Module	MGIP-*
Plug-in diplex filter options include 40/51, 42/54, 55/70, 65/86, and 85/105 MHz.	-

Line Extender Housing Upgrade Instructions

Original LE Housing Specifications

Type of Housing	Amp Capacity
LE I, LEII	10 Amps

Upgrade Instructions:

1. If the current seizure screws and anvils **are** “blue” in color, the line extender housing has already been upgraded and nothing needs to be done.

2. If the current seizure screws and anvils **are not** “blue” in color, replace the seizure screws and anvils with SA part number 548774.

Type of Housing	Amp Capacity
LE III	15 Amps

Upgrade Instructions: Nothing needs to be done.

Upgraded LE Housing Specifications

Type of Housing	Amp Capacity
LE I, LEII	15 Amps

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