

MLE300SASYSI-4** .25 High Gain Trunk & Bridger Amplifier 5-40/54-750 MHz

Module only specifications unless noted

Forward RF specifications of the MLE300SASYSI-4** .25 installed in a housing.				
Parameter	Units	Trunk	Bridger	Notes
Pass Band	MHz	54-750		
Amplifier Type	-	GaAsFET PD		
Flatness	dB	+/-0.6	+/-0.75	1,2
Minimum Full Gain (AGC mode)	dB	48.2		2
Operational Gain (MGC mode)	dB	44.2		3,4
AGC Range @ 750 MHz	dB	+3.1/-4.0		
Return Loss (typical)	dB	-16		5
Noise Figure	dB	6		6
Test points	dB	-30 (+/-1.5)		5
Loop Isolation (40-54 MHz)	dB	Better than -35		6
Hum Modulation @ 15 A	dBc	-60		
AC Bypass Current (continuous)	A	15		
DC Current Draw (maximum)	A	1.72		
Distortion Measurements @ Rated Level				
Reference Frequencies	MHz	750 / 650 / 550 / 54	750 / 650 / 550 / 54	
Output Levels	dBmV	48.5 / 46.8 / 45.6 / 36	48.5 / 46.8 / 45.6 / 36	
Channel Loading	NTSC	110	110	7
CTB	dBc	-70	-63	2
CSO (high side)	dBc	-73	-78	2
Cross Modulation	dBc	-70	-63	2,9

Return RF specifications of the MLE300SASYSI-4** .25 installed in a housing.				
Parameter	Units	Trunk	Bridger	Notes
Pass Band	MHz	5-40		
Amplifier Type	-	Silicon		
Flatness	dB	+/-0.5		2
Minimum Full Gain	dB	22.4	18.7	2
Operational Gain	dB	21.4	17.7	8
Return Loss (typical)	dB	-16		5
Noise Figure	dB	9	12	6
Test points	dB	-30 (+/-1.5)		5
Hum Modulation @ 15 A	dBc	-60 (5-12 MHz) -65 (12-40 MHz)		
Distortion Measurements @ Rated Level				
Reference Frequencies	MHz	T7-T12	T7-T12	
Output Levels	dBmV	35 (flat out)	35 (flat out)	
Channel Loading	NTSC	6	6	
CTB	dBc	-88	-88	2
CSO (high side)	dBc	-88	-88	2
Cross Modulation	dBc	-81	-81	2,9

Notes:

1. Measured with 16 dB of simulated cable.
2. Measured using an Interstage EQ = 72E750-14-WC and 0 dB plug-ins for all remaining forward and return locations.
3. Includes a 1 dB loss from the Input EQ.
4. When in MGC mode ensure there is at least 3.1 dB of reserved gain.
5. Measured using an Input EQ = 72E750-21-WC, Interstage EQ = 72E750-14-WC, 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 110 NTSC analog channels (no digital).
8. Includes a 1 dB loss from the Return EQ.
9. 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
Forward Roll Corrector (not accessible thru the cover, field upgradeable)	MLE1202FRC
Interstage EQ = 72E750-14-WC	72E750-*-WC
AGC/MGC Module (available pilot frequencies: 427.25 and 499.25 MHz)	MAC4**25R
Interstage Pad = MP000-0	MP***-0
Bridger EQ = 72E-00-WC	72E750-*-WC
B1/B2 Input Pad = MP000-0	MP***-0
B3/B4 Input Pad = MP000-0	MP***-0
B1/B2 Signal Director = MP000-0	MP***-0
B3/B4 Signal Director = MP000-0	MP***-0
B1, B2, B3, and B4 Output Pads = MP000-0	MP***-0
Trunk Return Input Pad = MP000-0	MP***-0
B1/B2 Return Input Pad = MP000-0	MP***-0
B3/B4 Return Input Pad = MP000-0	MP***-0
Return Roll Corrector (not accessible thru the cover, field upgradeable)	MLE1202RRC
Low Pass Filter (not accessible thru the cover, field upgradeable)	MLERF100104
230 V AC Crowbar Surge Protector	MLE300SATCB
Fuse 1, Fuse 2, Fuse 3, Fuse 4, Fuse 5, and Fuse 6 = 25 Amp Auto Fuse	0189940-25
Required Plug-ins	Plug-in Series
Input Pad	MP***-0
Input EQ	72E750-*-WC
Return EQ	7REF42-*-WC
Return Output Pad	MP***-0
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.	-

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