

MLE3008T Forward Trunk Amplifier 54-750 MHz

Module only specifications unless noted

Parameter	Test Conditions		Value	Units	Notes
Technology	-		GaAsFET PD	-	-
Bandwidth	-		54-750	MHz	-
Response Flatness	-		+/-0.5	dB	1,2
Minimum Full Gain	-		41.5	dB	2,3
Gain Control Range	-		8.0	dB	-
Slope Control Range (cable @ 750 MHz)	-		4-12	dB	-
Input Return Loss (75 ohm)	Freq	54-600 MHz	-16	dB	4
		601-750 MHz	-12		
Main Output Return Loss (75 ohm)	Freq	54-690 MHz	-16	dB	4
		691-750 MHz	-12		
Aux. Output Return Loss (75 ohm)	Freq	54-375 MHz	-16	dB	4
		376-750 MHz	-12		
Auxiliary Output (relative to main output)	-		21.1 +/-0.5	-dB	5
Noise Figure	-		9.5	dB	5
DC Current Draw (max)	-		1000	mA	2
Distortion Measurements @ Rated Level					
Rated Output Levels	-		42/48	dBmV	2,5,6
Number of Channels	-		110	-	6
Rated Operating Gain	-		35	dB	7
Rated Operating Slope (cable @ 750 MHz)	-		8	dB	-
Composite Triple Beat	-		-64	dBc	2,6
Composite Second Order	-		-66	dBc	2,6
Carrier to Noise	-		61	dBc	2,6
Cross Modulation	-		-64	dBc	2,6

Notes:

1. Measured at 38.5 dB of gain with 8 dB of simulated cable and an Input Pad = MPBNP9A-00, Input Equalizer = 6-2E-0, Response Equalizer = 18 AWG buss wire jumper, Interstage Pad = 18 AWG buss wire jumper, Auxiliary Output Pad = MPBNP9A-04.
2. Measurements are done after the unit's temperature has stabilized. Properly heat sink the module if it will be powered for more than five minutes.
3. Gain measured with 8 dB of simulated cable between the input and output with an Input Pad = MPBNP9A-00, Input Equalizer = 6-2E-0, Response Equalizer = 18 AWG buss wire jumper, Interstage Pad = 18 AWG buss wire jumper, Auxiliary Output Pad = MPBNP9A-04.

4. Measured at rated gain and slope with an Input Pad = MPBNP9A-03, Input Equalizer = 6-2E-0, Response Equalizer = 18 AWG buss wire jumper, Interstage Pad = 18 AWG buss wire jumper, Auxiliary Output Pad = MPBNP9A-04.
5. Measured at rated gain and slope with an Input Pad = MPBNP9A-00, Input Equalizer = 6-2E-0, Response Equalizer = 18 AWG buss wire jumper, Interstage Pad = 18 AWG buss wire jumper, Auxiliary Output Pad = MPBNP9A-04.
6. Standard channels sloped as indicated by dual levels, per NCTA test methods.
7. Gain measured in a 9-TH housing, MLE3008MC chassis, 8 dB of simulated cable with an Input Pad = MPBNP9A-00, Input Equalizer = 6-2E750-04L, Response Equalizer = 18 AWG buss wire jumper, Interstage Pad = 18 AWG buss wire jumper, Auxiliary Output Pad = MPBNP9A-04. There is a reserved gain of 3 dB for AGC/ASC operation.

Accessories	
Factory Installed Plug-ins	
Interstage Slope Board	MLE300502ISB
Response Equalizer (Debumper) = 18 AWG buss wire jumper (not accessible thru the cover)	6EDB
Interstage Pad = 18 AWG buss wire jumper (not accessible thru the cover)	MPBNP9A
Auxiliary Output Pad = MPBNP9A-04 (not accessible thru the cover)	MPBNP9A
Required Plug-ins	
Input Pad	MPBNP9A
Input Equalizer	6-2E750-L
Optional Plug-ins	
Response Equalizer (Debumper) (not accessible thru the cover)	6EDB