	TECHNICAL BULLETIN	
BROADBAND HI POWER RF AMPLIFIER	**E10100-02-05**	**Rev.B**

Designed for Wide-band High Power application in the V-UHF range. This high reliability amplifier utilizes class AB Silicon RF Power LDMOSFET devices that provide high broadband gain, wide dynamic range and good amplitude modulation characteristics. The amplifier includes an internal circuit that provide the external Voltage Control of Gain for AM modulation or external ALC features. High efficiency, reliable operation and Flat gain are being achieved by employing unique broadband RF networks, custom machined housing and heavy duty components. Each unit undergoes extensive burn-in prior to final test and Q/A.

Absolute Maximum Ratings

Parameter	Rating	Units
Supply Voltage	30	Vdc
Input Current	12	A
RF Input	+ 15 max	dBm
Operating Temperature	-40 to + 85	℃
Storage Temperature	-54 to +125	℃

Operating Temperature: The temperature value of the amplifier's base plate.

Electrical Characteristics @ T = 25 ℃ & VDD = 28.0 Vdc

Parameter	Values		Units
Frequency Range	30 - 500	min	MHz
Output Power @ 1 dB comp.	35 @ 30-70 MHz	min	W
Output Power @ 1 dB comp.	65 @ 70-500 MHz	min	W
Output Power @ saturation	100	typ	W
Small Signal Gain	43	min	dB
Gain Flatness	+/- 2.5	max	dB
Noise Figure	12	max	dB
2^{nd} Harmonic @ 30 W	- 25	min	dBc
3^{rd} Harmonic @ 30 W	- 15	min	dBc
V AGC Input @ 50 mA	0 - 10		V
V BIAS	5 +/- 0.1		V
Gain Control Range	60	min	dB
Input VSWR	3 : 1	max	

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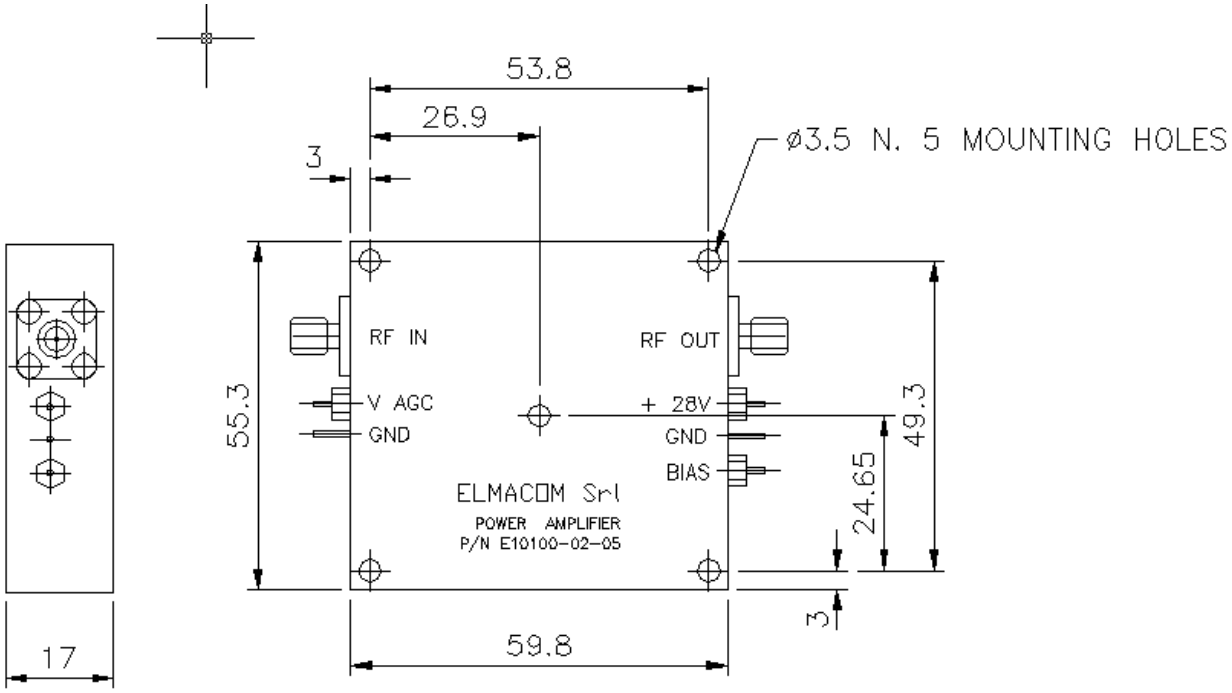
OUTLINE DRAWING ***"Adequate Heatsink Required"***



Dimensions in mm