



MODEL KMA2040T 200 WATTS CW/PEP 4.4 to 44 MHz

AR Modular RF’s **KMA2040T** is an amplifier module intended for OEM applications or integration into a user system. The module is comprised of a PCBA encased in an aluminum enclosure. Terminals are provided for external power, control, and monitoring including standard TTL drive for blanking. Cooling and device protection are the responsibility of the user.

PERFORMANCE SPECIFICATIONS – MODEL KMA2040T AMPLIFIER

ELECTRICAL

All specifications apply at 28 VDC input, 200 Watts output power

SPECIFICATION	Units	Minimum	Typical	Maximum	Notes
Amplifier Class	-	A/B			
Frequency Response	MHz	4.4	-	44	Amplifier operating range
Rated Output Power	W	200	-	-	Continuous operation, CW/PEP; Specifications apply at rated output power; Amplifier capable of output power in excess of 250 Watts under certain operating conditions
	dBm	53	-	-	
Power Gain	dB	52	-	58	To achieve rated output power of 200 Watts requires an input drive of between -5 and +1 dBm
Rated Input Power	dBm	-5	-	1	
Linearity	dB	-	1	3	Amplifier compression at rated output power
Blanking ON/OFF Time	µs	-	-	20	RF ON/OFF, rear panel control
Blanking ON/OFF Ratio	dB	15	18	-	@ 40MHz, rated output power
Input / Output Impedance	Ohm	-	50	-	Nominal
VSWR Tolerance	-			2:1	Operational range
Harmonic Performance	2 nd	-	-33	-20	
	3 rd	-	-20	-11	
Input Power (DC)	VDC	24	28	30	Measured at module power terminals; Unit tested only at 28V +/- 0.1V
Current Draw @ 28 V	A			1	Powered, Blanked
				3	Un-blanked, no RF drive
				18	Un-blanked, 200 Watts RF out

MECHANICAL & ENVIRONMENTAL

SPECIFICATION	Units	Details	Notes
Size	Inches	See outline drawing below	
Weight	kg	1.7	Without Heatsink
		2.65	With Heatsink
Operating Temperature, Ambient	°C	N/A	See Cooling below
Relative Humidity	%	95	Maximum, non-condensing
Cooling	-	Customer Provided	Maximum Enclosure temperature not to exceed 60°C

INTERFACE & CONTROL

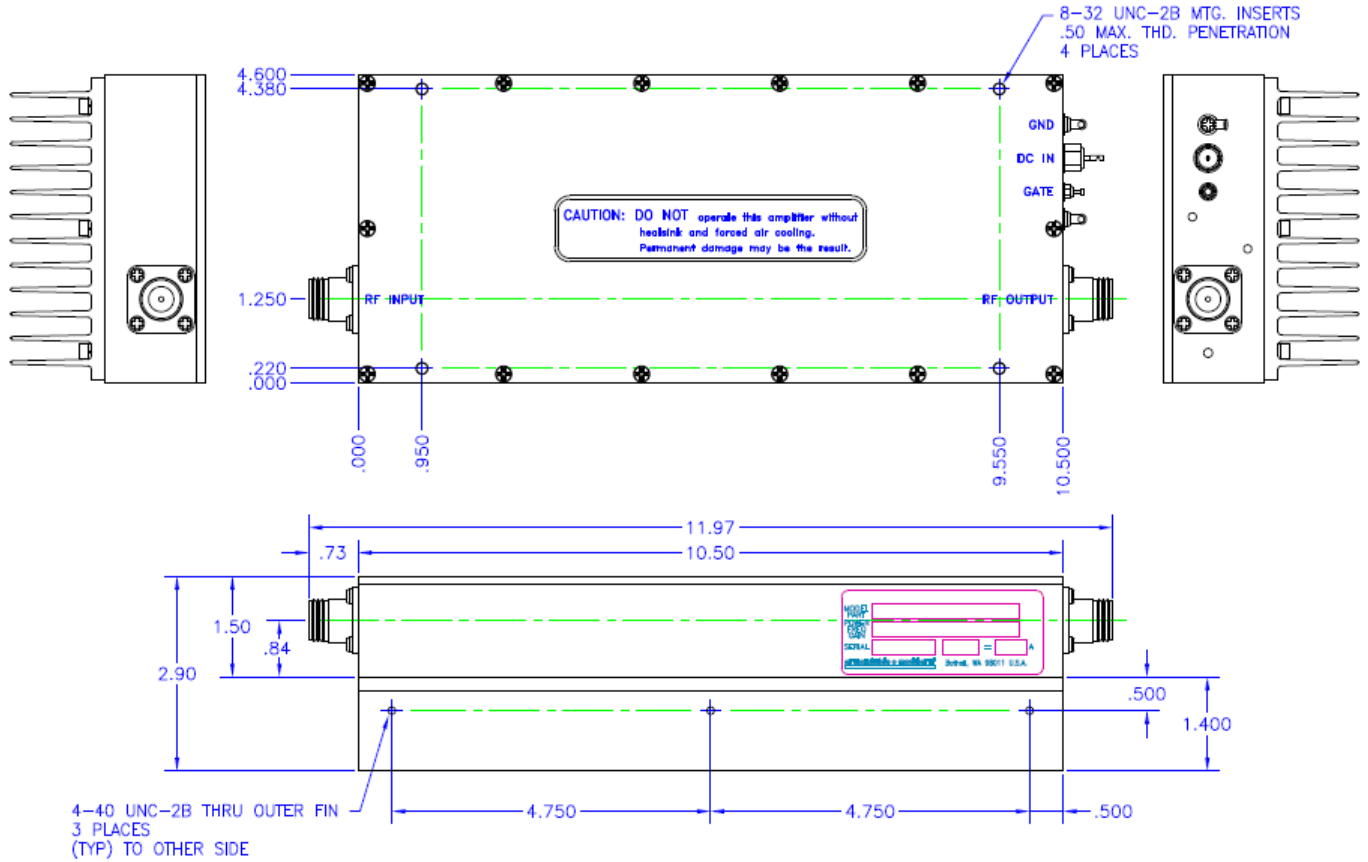
The **KMA2040T** has interface and control elements on both the front and rear panels.

Element	Panel	Details	Notes
DC Power Ground	Rear	Lug	"GND"
+VDC In	Rear	Pin	"DC IN"
Remote Interlock / Blanking ➔ TTL Control, >10kΩ	Rear	Pin	"Gate"
		Unterminated or <0.5 V	OFF / Blanked (no RF bias)
		Between 2 and 5 V	ON / Un-blanked (RF bias)
Remote Interlock Ground	Rear	Lug	No Label (next to "Gate") Recommended for use with shielded coaxial cable for TTL control
RF Input	Front	N-Type, Female	"RF Input"
RF Output	Rear	N-Type, Female	"RF Output"

ORDERABLE MODEL CONFIGURATIONS

MODEL NAME	SPECIFICATIONS
KMA2040T	Standard Configuration (C1) – Specifications as detailed in this document, including Heatsink

Outline Drawing



Note – Drawing is representative of the standard KMA2040T model (configuration C1) and may not be applicable to all model variations