



The MP3500/200/33SK-A4 is suitable for 3.5 GHz band Wi-Max linear amplification. The amplifier employs linear LDMOS power devices that provide sufficient output power, wide dynamic range, and high gain. Amplifier integrates a Bi-directional coupler for ALC, forward and reverse VSWR protection.

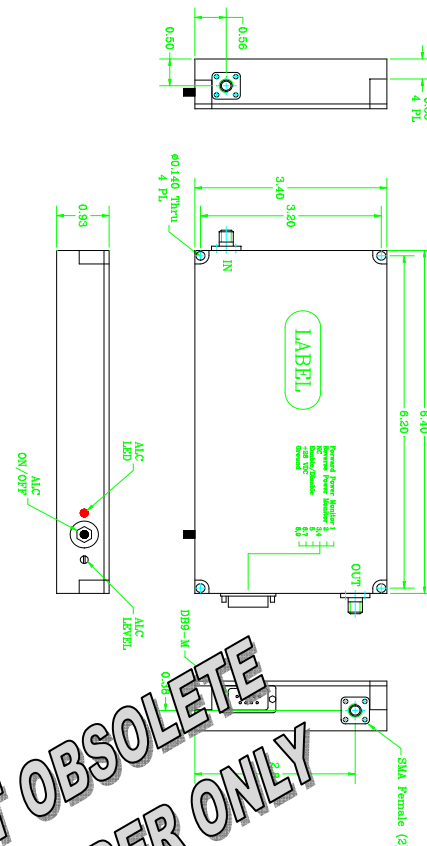
Model: MP3500/200/33SK-A4

1. Electrical Characteristics		
Item	Value	Note
Frequency Range	3400 ~ 3600 MHz	
Gain	45 dB (Min.)	
Gain Flatness	ALC Off	Over Freq. Range @ ALC Set Point
	ALC On	
	±1.0 dB (Max.)	±0.5 dB (Max.)
Gain Variation	± 1 dB	Over Temp. Range
Output Power P1	+43 dBm (Min.)	Measured with Pulse 100 μs, 10% Duty Cycle
Output Power Psat	+44 dBm (Typ.)	Measured with Pulse 100 μs, 10% Duty Cycle
Output IP3	+54 dBm (Min.)	2 Tones @ +33 dBm, 1 MHz Spacing
EVM @ +33dBm	1.5% (Typ.)	OFDM: 64-QAM symbols with 3.84 MHz or 7.68 MHz channel Bandwidth.
Input / Output VSWR	≤ 1.2	Output Isolator Included
Harmonics	-45 dBc (Max.)	Pout @ +33 dBm
Spurious	-70 dBc (Max.)	Pout @ +33 dBm
HPA Enable/Disable	TTL "0V or Open" ⇒ Enable TTL "5V" ⇒ Disable	
ALC ON/OFF	Local Switch	
ALC Level	ALC Setting Range >15 dB	Adjustable via Local Potentiometer
FWD. Power Monitor	4.0 ± 0.2 V @ +33 dBm Power Monitor Flatness: ± 0.5 dBm	RMS Detection
REV. Power Monitor	4.0 ± 0.2 V @ +49 dBm Power Monitor Flatness: ± 0.5 dBm	RMS Detection
DC Input Voltage	28V ± 1V	Operating Voltage Range +24-30V
DC Current	2A (Max.)	Pout @ +33 dBm
Thermal Shutdown	+85°C ± 5°C	Auto Recover @ +70°C ± 5°C
Input / Output Impedance	50 Ω	
Input Max without Damage	+5 dBm	With ALC on
Load Condition	1: ∞	No Damage Pout @ +33 dBm

3. Environment Characteristics		
Operating Temperature	-20°C ~ +80°C	Base Plate
Cooling	External Heatsink	
Humidity (Non-condensing)	95% (Max.)	

4. DB9 Pin Description		
Pin 1	Forward Power Monitor	
Pin 2	Reverse Power Monitor	
Pin 3,4	NC	
Pin 5	Pin5: Enable/Disable	Enable: TTL Low or Open Disable: TTL High
Pin 6,7	28V	
Pin 8,9	Ground	

5. Outline Drawing



2. Mechanical Characteristics		
Monitoring Connector	DB-9 Male	4 – 40 screw
RF IN/OUT Connector	SMA 4 Holes Female	
DC Input	Pin 6,7 on DB-9	
Dimensions	6.4" x 3.4" x 1"	
LED	LED Indicator	ALC On
ALC Level Adjustment	Potentiometer	
ALC On/Off	Momentary Switch	Default: ALC On Push: ALC Off

Revision History			
REV	Reason to Change	Date	Initialed by

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