



MP270/35/10SK-A6 Amplifier is suitable for VHF and UHF linear applications. The amplifier employs linear GaN power devices that provide high efficiency, ample output power, wide dynamic range, and high gain. The product integrates a bi-directional coupler for monitoring Forward and Reverse Power.



Model: MP270/35/10SK-A6

1. Electrical Characteristics		
Item	Value	Note
Frequency Range	20 ~ 530 MHz	
Power Gain	38 (Min.)	Pout @ +40 dBm
Gain Flatness	± 2.0 dB (Max.)	Over Frequency Range
Gain Variation	± 1.0 dB	Over Temperature Range
Output Psat	+40 dBm (Min.)	
Input VSWR	1.3:1 (Max.)	
HPA Enable/Disable	TTL "Low or Open" ⇒ Enable TTL "High" ⇒ Disable	
Switching On/Off Time @ 90% Power Output	3 μs (Max.)	TTL Control Signal: 1 KHz , 50% Duty Cycle
Harmonics	-10dBc (Max.) / -15 dBc (Typ.)	Pout @ +40 dBm
Forward Power Monitor	2.0 ± 0.2 V @ 10 Watts	RMS Detection
Reverse Power Monitor	2.0 ± 0.2 V @ 10 Watts	RMS Detection
Over Temperature Protection	Shutdown @ +85°C ± 5°C	Auto Recover @ +70°C ± 5°C
DC Input Voltage / Current	+28 VDC ± 1V / 0.8 A (Max.)	DC Input Voltage / Current @ Pout @ 10 Watts CW
Efficiency	43% (Min.)	
Input /Output Impedance	50 Ω	
Capable of Handling VSWR	6:1	
Max. Input Power (Without Damage)	+4 dBm	

2. Mechanical Characteristics		
Monitoring Connectors	DB9-Male	4 – 40 screw
RF IN/OUT Connector	SMA 4 Hole –Female	
Dimensions	3.0" x 2.75" x 0.8"	
Weight	0.28 lb	

3. Environment Characteristics		
Operating Temperature	-20°C ~ +80°C	Base Plate

Revision History			
REV	Reason to Change	Date	Initialed by
A	Pass-band expanded to 20-530 MHz	05/10/13	YZ
B	Max. Switching Time Added	10/16/14	YZ

4. DB9-Male Pin Description		
1	GND	
2	NC	
3	+28 VDC	
4	Enable / Disable	Enable: TTL "Low or Open" Disable: TTL "High"
5	Reverse Power Detection	
6	Forward Power Detection	
7, 8, 9	N/C	

5. Outline Drawing

