



The MP435/70/40SK-A is suitable for UHF linear amplification. The amplifier employs linear LDMOS 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: MP435/70/40SK-A

1. Electrical Characteristics		
Item	Value	Note
Frequency Range	380 ~ 450 MHz	
Gain	45 ± 1.0 dB	
Gain Flatness	± 0.5 dB (Typ.)	Over Frequency Range
Gain Variation	± 1.0 dB	Over Temperature Range
Output P1	+43 dBm (Min.)	
Output Psat	+44 dBm (Min.)	
IP3	+55 dBm (Min.)	Two Tones, +30 dBm/Tone, 100 KHz Spacing
Noise Figure	5 dB (Max.)	
Input VSWR	1.8: 1 (Max.)	
Output VSWR	1.3:1 (Max.)	Isolator Included
HPA Enable/Disable	TTL "Low or Open" ⇒ Enable TTL "High" ⇒ Disable	
Forward Power Monitor	4.0 ± 0.1 V @ +36 dBm	RMS Detection
Reverse Power Monitor	4.0 ± 0.1 V @ +36 dBm	RMS Detection
Current Alarm	Open Collector Circuit Open : Alarm Short : Normal	Pin 3 & LED
Temperature Alarm	Open Collector Circuit Open : Alarm Short : Normal	Pin 4 & LED Alarm @ +85°C ± 5°C
Harmonics	-50 dBc (Max.)	Pout @ +36 dBm
DC Input Voltage / Current	+12 VDC / 3.3 A (Max.)	DC Input Voltage / Current @ Pout @ 4 Watts CW
Input /Output Impedance	50 Ω	
Capable of Handling VSWR	∞:1	
Input Max. without Damage	+10 dBm	

2. Mechanical Characteristics		
Monitoring Connectors	DB9-Male	4 – 40 screw
RF IN/OUT Connector	SMA 4 Hole –Female	
Current Alarm Indication	Red LED	
Temperature Alarm Indication	Red LED	
Dimensions	6.40" x 3.95" x 1.0"	
Weight	1.2 lb	

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

Revision History			
REV	Reason to Change	Date	Initialed by
	Approved for Production	07/27/16	YZ

4. DB9-Male Pin Description		
1	Forward Power Monitor	
2	Reverse Power Monitor	
3	Current Alarm	Open: Alarm Short: Normal
4	Temperature Alarm	Open: Alarm Short: Normal
5	Enable / Disable	Enable: TTL Low or Open Disable: TTL High
6, 7	+12VDC	
8, 9	Ground	

5. Outline Drawing

