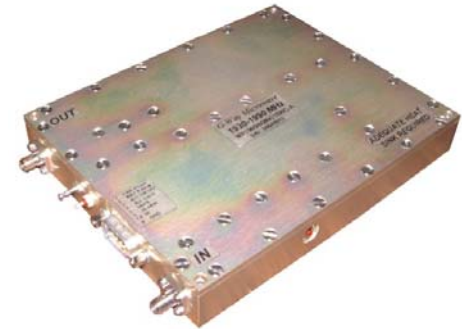




The MP740/25/5MK-A is suitable for 700 MHz band high power linear applications. The amplifier employs linear LDMOS power devices that provide sufficient output power and wide dynamic range. Amplifier is equipped with Automatic Level Control loop, enabling it to be set to an Output Power level with maximal linearity at specific Communication System environment.

Model: MP740/25/5MK-A



1. Electrical Characteristics		
Item	Value	Note
Frequency Range	728 ~ 775 MHz	
Gain	40 ± 1 dB (Typ.)	
Gain Flatness	± 1.0 dB (Max.)	Over Freq. Range
Gain Variation	± 1.0 dB (Typ.)	Over Temp. Range
Output P1	+44 dBm (Typ.)	
Output Psat	+45 dBm (Typ.)	
Output IP3	+57 dBm (Typ.)	Two tones measured at +33 dBm per tone and 1 MHz spacing
Input / Output VSWR	≤ 1.2	
Output VSWR	Isolator Included	
Over Temp. Protection	Shutdown @ +85 ± 5°C	
HPA Enable / Disable	TTL "0V or Open" ⇒ Enable TTL "5V" ⇒ Disable	
ALC ON/OFF	Enable: TTL Low Disable: TTL High	
ALC Level	ALC Setting Range >15 dB	Continuous Adjustable Range via Analog Voltage Input 0-5V Accuracy: ± 1 dB
Forward Power Monitor	4.0 ± 0.1 V @ +37 dBm	RMS Detection
Reverse Power Monitor	4.0 ± 0.1 V @ +37 dBm	RMS Detection
Harmonics @ P1 dBm	-45 dBc (Typ.)	
DC Input Voltage / Current	28VDC ± 1V / 1.6 A	DC Input Voltage / Current at Pout 10W CDMA 1FA
Input / Output Impedance	50 Ω	
Maximum Input Power	+10 dBm	With ALC ON

2. Mechanical Characteristics		
Monitoring Connector	DB9-Male	4-40 screw
RF IN/OUT Connector	SMA 4 Holes –Female	
DC Input	#8 Feed-thru	
Dimensions	4.7" x 5.9" x 0.87"	

Revision History			
REV	Reason to Change	Date	Initialed by

3. Environment Characteristics		
Operating Temperature	-20°C ~ +70°C	Base Plate
Storage Temperature	-40°C ~ +85°C	
Humidity	95 %	

4. DB9 Pin Description		
1	Forward Power Monitor	
2	Reverse Power Monitor	
3	ALC On/Off	ALC ON = TTL Low ALC OFF = TTL High
4	ALC Level Input	0-5V
5	Enable / Disable	Enable: TTL Low or Open Disable: TTL High
6, 7, 8	N/C	
9	Ground	

