



The MP425/50/40SK-BD-A is suitable for 400-450 MHz band bi-directional and High Power applications. The amplifier employs linear LDMOS power devices that provide sufficient output power, wide dynamic range, and high efficiency. It integrates Band Pass filter for enhance receiving sensitivity. Also thermal protection and isolator for load mismatch are included. It provides Automatic Tx gain control and high speed auto Tx/Rx switching.



## Model: MP425/50/40SK-BD-A

1. Electrical Characteristics		
Item	Value	Note
Frequency Range	400 ~ 450 MHz	
Tx Gain	10 dB (Min.)	AGC Enabled
Tx Gain Flatness	+/- 0.5 dB (Max.)	AGC Enabled
Tx Output Power Range	+25 dBm to +40 dBm	
Tx Input Power Range	+15 dBm to +30 dBm	
Input / Output VSWR	≤ 1.5	
Harmonics	-50 dBc (Max.)	Pout @ 10 Watts
Spurious	-70 dBc (Max.)	
Input Level Enabling Tx	≥ +15 dBm ± 0.5 dBm	
VSWR Protection	Isolator Included	
Rx Gain	12 dB +/- 1dB	
Rx Noise Figure	2.5 dB (Typ.)	
DC Input Voltage	+ 12.5 VDC (Nominal)	Operating Voltage Range: +12V to +13.5V
DC Current	2.4 A (Max.)	Pout @ 10 Watts
Thermal shutdown	+ 85°C ± 5°C	Auto Recover @ +70°C ± 5°C
Tx/Rx Switching Time	20 μSec (Max.)	
Input / Output Impedance	50 Ω	
Max. Input Power without Damage	+32 dBm	

2. Mechanical Characteristics		
RF IN/OUT Connector	SMA Female	
DC Input	SMA Female	
Dimensions	5.96" x 2.96" x 0.83"	
Weight	1.0 lb (Approx.)	
LED's	Green	Rx On
	Red	Tx On

Revision History			
REV	Reason to Change	Date	Initialed by

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

## 4. Outline Drawing

