



Eyal MAG Ltd.

Phone: 972-9-7499100 Fax: 972-9-7493669

Kibbutz Eyal D.N. Hasharon Hatichon 45840 Israel

Web: [www.eyal-mag.com](http://www.eyal-mag.com) Email: [emi@eyal-emi.com](mailto:emi@eyal-emi.com)



## ***MULTI CARRIER POWER AMPLIFIER FOR PCS REPEATER SYSTEMS MCPA-2224B/PCS***

### **Features:**



- **CDMA IS-95C, Cdma2000 10 CARRIERS**
- **1840 to 1860 MHz**
- **45 W Output Power**
- **27 V DC Voltage Range**
- **- 40°C to +85°C Operating Temperature Range**

### **Feedforward Technology**

- **Linear Main Amplifiers Design, Utilizing LD-MOS Transistors.**
- **Optimum Error Amplifier Design for Perfect IMD Suppression.**
- **Low Loss Delay Filters.**
- **Innovative Adaptive Feedforward Correction Algorithm (Pending Patent).**
- **DSP Based Controller.**
- **Superior IMD Suppression Over The Full Operating Frequency and Temperature Range.**
- **Minimized DC Current, High Efficiency.**
- **Alarms and Indications Per Customer Request.**
- **Mechanical Design: Rack Mount and Modules**



Eyal MAG Ltd.

Phone: 972-9-7499100 Fax: 972-9-7493669

Kibbutz Eyal D.N. Hasharon Hatichon 45840 Israel

Web: [www.eyal-mag.com](http://www.eyal-mag.com) Email: [emi@eyal-emi.com](mailto:emi@eyal-emi.com)



**SPECIFICATION SUMMARY**  
**FOR PCS MCPA FOR REPEATER SYSTEM**  
**MCPA-2224B/PCS**

<b>PARAMETERS</b>	<b>SPEC.</b>
FREQ. RANGE KTF	<b>1840-1860 MHz</b>
OPERATING BANDWIDTH	<b>20 MHz (30 MHz Option)</b>
GAIN	<b>53 dB ±0.8 dB</b>
GAIN FLATNESS	<b>±0.2 dB Over any 5 MHz</b>
GAIN Vs TEMP.	<b>±1.25 dB</b>
OUTPUT CW POWER	<b>45 W</b>
10 CDMA CARRIERS	<b>45 W</b>
IMD AT ±885 KHz @ 45 W, 10 CARRIERS CDMA IS-95C	<b>-47 dBc/30 KHz RBW TYPICAL AT 25 °C</b>
IMD AT ±1.98 MHz @ 45 W, 10 CARRIERS CDMA IS-95C	<b>-50 dBc/30 KHz RBW TYPICAL AT 25 °C</b>
Spurs AT ±2.25 MHz @ 45 W, 10 CARRIERS CDMA IS-95C	<b>-13 dBm/1 MHz TYPICAL AT 25 °C</b>
SUPPLY VOLTAGE	<b>27 V ±1 V</b>
SUPPLY CURRENT	<b>Typical 16 A / 18 A max (Po=45 W)</b>
ALARMS	<b>TEMP.</b>
	<b>V.S.W.R</b>
	<b>OVER POWER</b>
	<b>OVER VOLTAGE</b>
INDICATIONS	<b>FORWARD POWER MONITOR</b>
	<b>TEMPERATURE MONITOR</b>
CONNECTORS	<b>IN: SMA/F</b>
	<b>OUT: SMA/F</b>
	<b>SAMPLED OUT: SMA/F</b>
OPERATING TEMP. RANGE	<b>-30 °C ÷ +60 °C AMBIENT</b>
STORAGE TEMP. RANGE	<b>-40 °C- +85 °C</b>
SIZE	<b>354.9 x 266.7 x 54.0 mm</b>
TYPE	<b>ADAPTIVE FEED FORWARD</b>