



Coming Attractions

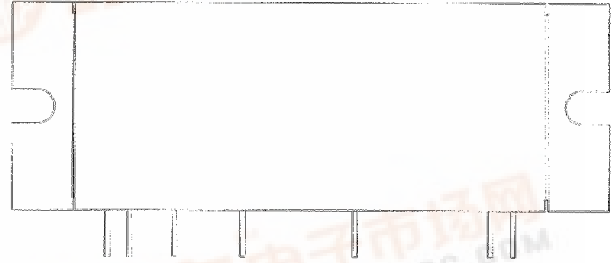
Wireless Power Module, 15W 1930 - 1990 MHz

PHM1990-15

V2.00

Features

- Linear Bipolar Wireless Hybrid Module
- PCN/PCS Base Station Applications
- Input and Output Matched to 50 Ω
- Common Emitter Configuration
- Internal Temperature Compensated Bias Networks
- 30 dB min Gain
- Operating Voltage 24-26V



Absolute Maximum Ratings at 25°C

Parameter	Absolute Maximum
Supply Voltage, Collector	27V
Supply Voltage, Base	6V
Input Power	5dBm
Output Power	20W
Power Dissipation	60W
Operating Case Temp.	-10 to +85°C
Storage Temperature	-40 to +125°C

1. Operation of this device outside any of these limits may cause permanent damage.

Electrical Characteristics at 25°C

Parameter	Symbol	Test Conditions	Units	Typ	Min.	Max.
Output Power Compression	P1dB	$V_{CC}=26\text{ V}, V_{BB}=5\text{ V}, F=1930, 1990\text{ MHz}$	W	15	-	-
Power Gain	G_P	$V_{CC}=26\text{ V}, V_{BB}=5\text{ V}, P_{OUT}=15\text{ W}, F=1930, 1990\text{ MHz}$	dB	35	30	-
Power Gain Flatness	ΔG_P	$V_{CC}=26\text{ V}, V_{BB}=5\text{ V}, P_{OUT}=15\text{ W}, F=1930, 1990\text{ MHz}$	dB	1.5	-	-
Overall Efficiency	η	$V_{CC}=26\text{ V}, V_{BB}=5\text{ V}, P_{OUT}=15\text{ W}, F=1930, 1990\text{ MHz}$	%	30	25	-
Input Return Loss	RL	$V_{CC}=26\text{ V}, V_{BB}=5\text{ V}, P_{OUT}=15\text{ W}, F=1930, 1990\text{ MHz}$	dB	12	10	-
Load Mismatch Stability	VSWR-S	$V_{CC}=26\text{ V}, V_{BB}=5\text{ V}, P_{OUT}=15\text{ W}, F=1930, 1990\text{ MHz}$	-	-	-	2:1
Load Mismatch Tolerance	VSWR-T	$V_{CC}=26\text{ V}, V_{BB}=5\text{ V}, P_{OUT}=15\text{ W}, F=1930, 1990\text{ MHz}$	-	-	-	3:1

The Preliminary Specifications Data Sheet Contains Typical Electrical Specifications Which May Change Prior to Final Introduction.

M/A-COM, Inc.

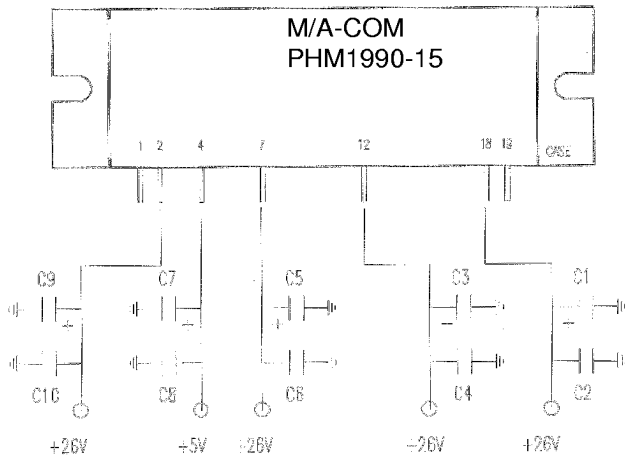
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Recommended Bias Decoupling Scheme for Module

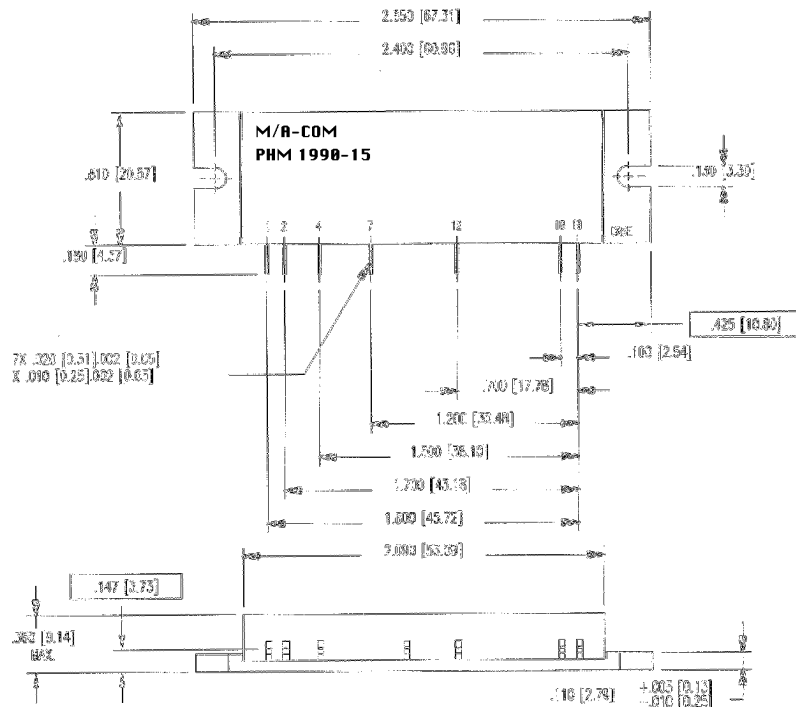


C1,C3,C5,C7,C9 = 1.0uF Tantalum Capacitors
 C2,C4,C6,C8,10 = 1800pF Capacitors

Pin Configuration

Pin	Description
1	RF Input
2	VC1
4	VC2
7	V _{BB}
12	VC3
18	VC4
19	RF Output
Case	Ground

Outline Dimensions



UNLESS OTHERWISE NOTED, TOLERANCES ARE
 INCHES ±.005' [MILLIMETERS ±.13MM]

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