

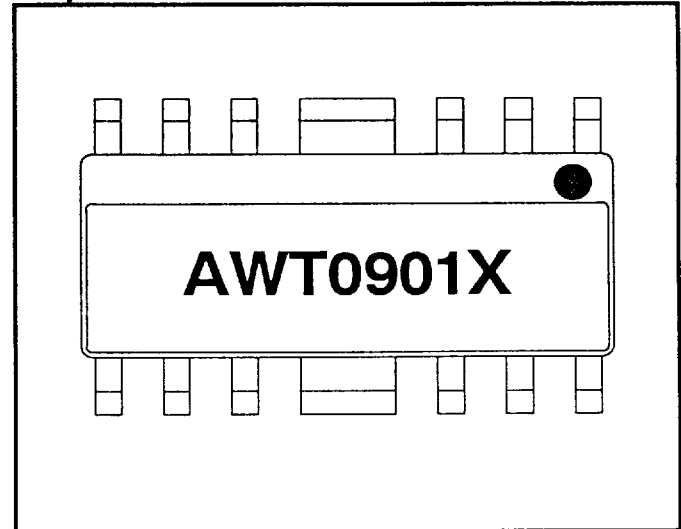
## 900 MHz Band DAMPS GaAs Power Amplifier IC

### DESCRIPTION

The AWT0901X is a monolithic Power Amplifier suited for DAMPS cellular telephone applications in a plastic package, reducing both size and cost in next generation terminals.

### FEATURES:

- High Output Power
- High Efficiency
- Low Distortion
- Small Size
- Surface Mount Package
- Low Cost



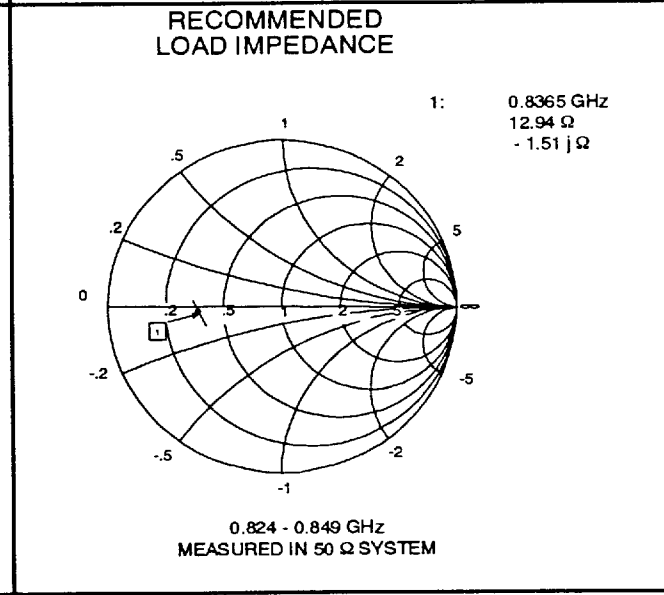
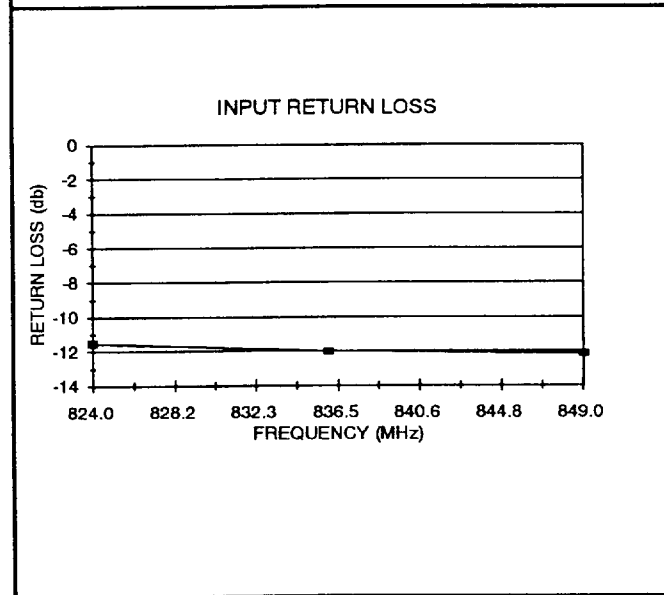
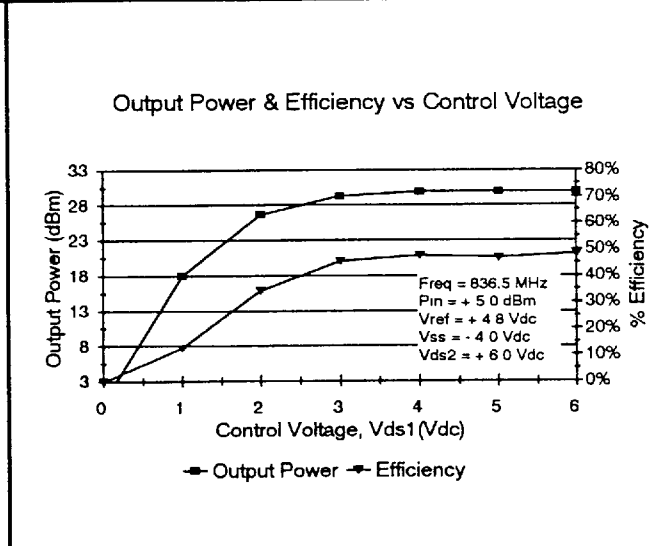
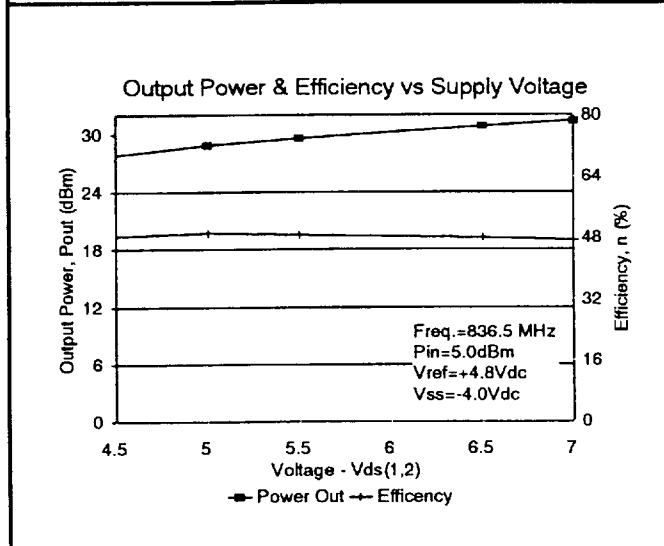
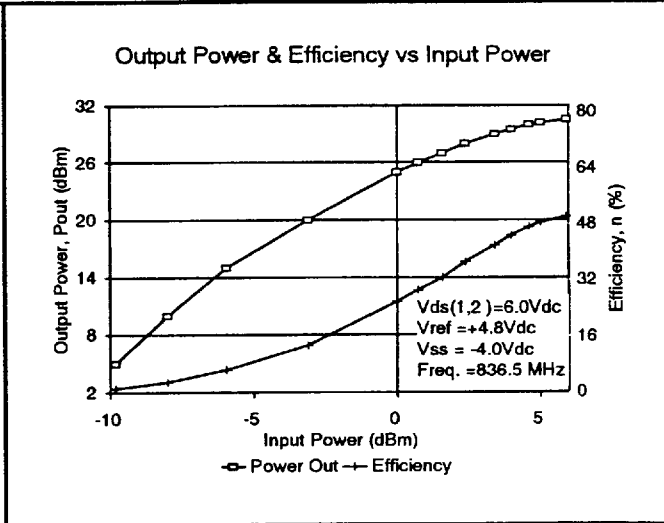
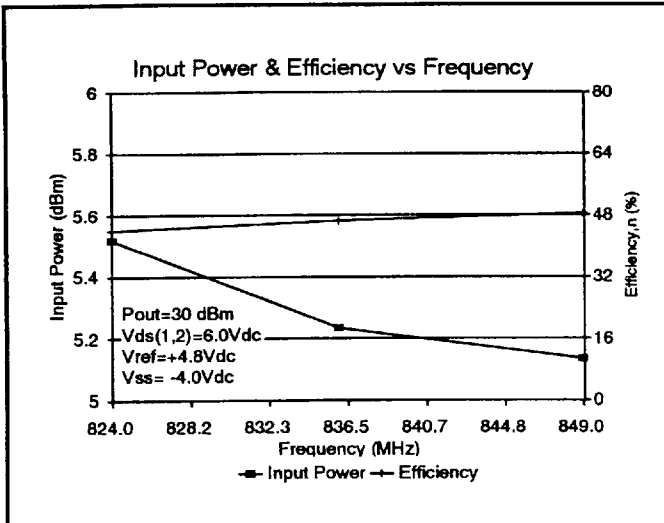
### ELECTRICAL CHARACTERISTICS:

(Pin  $\leq$  +6 dBm, f=824 - 849 MHz, Vds= +6Vdc, Vref= +4.8 Vdc, Vss = - 4Vdc, Tc= 25°C, 50 $\Omega$  Input & 50 $\Omega$  External Output Match)

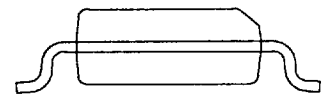
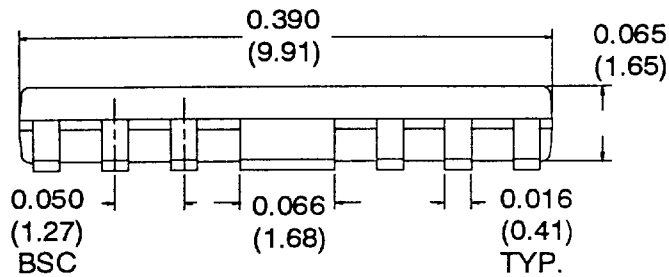
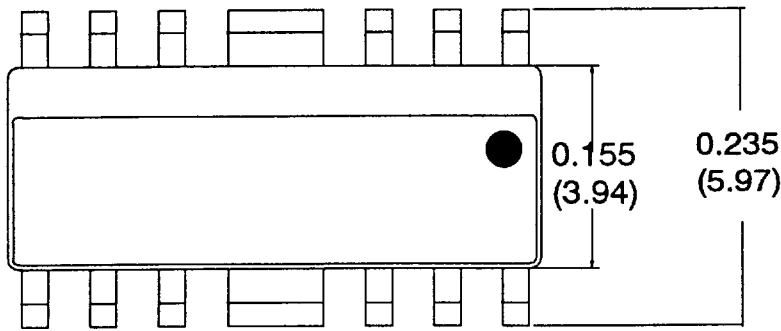
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	PARAMETER
Frequency	f <sub>o</sub>	824		849	MHz
Power Output	P <sub>out</sub>		28		dBm
Power Added Efficiency	PAE		45		%
Gain			22		dB
Intermodulation Distortion (IMD)					dBc
3rd			- 24		
5th			- 34		
7th			- 38		
Stability: - 80 dBc, all spurious outputs relative to desired signal			6:1		VSWR load, all phase angles (P <sub>out</sub> = Rated Pout) Vds = +6.0V, Zs = 50 $\Omega$
Input Return Loss	R <sub>tn<sub>in</sub></sub>		7.5		dB
Operating Range	Tc	- 20		+ 70	°C
Drain to Source Voltage	Vds		6.0		Vdc
Reference Voltage Supply Current	I <sub>v<sub>ref</sub></sub>		4		mA
Negative Supply Current	I <sub>v<sub>ss</sub></sub>		4		mA
Quiescent Current	I <sub>dsq1</sub> + I <sub>dsq2</sub>			200	mA

This data sheet contains technical information about product ANADIGICS is planning to introduce. The data and product specifications are subject to change prior to formal introduction. Please note : This device is NOT to be used for device qualification or production.

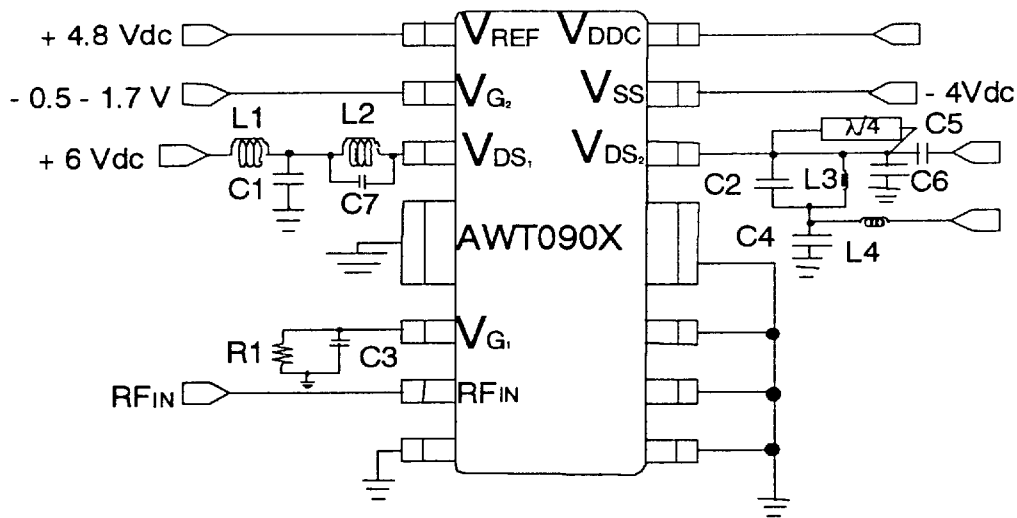
35 Technology Drive, Warren NJ 07059 • (908)-668-5000 • FAX:(908)-668-5068 Email: ANADIGICS @ATTmail.com, 2/16/95-AWT0901 1



This data sheet contains technical information about product ANADIGICS is planning to introduce. The data and product specifications are subject to change prior to formal introduction. Please note: This device is NOT to be used for device qualification or production.  
 35 Technology Drive, Warren NJ 07059 • (908)-668-5000 • FAX: (908)-668-5068 Email: ANADIGICS@ATTmail.com, 2/16/95-AWT0901 2



Dimensions in inches (mm)



L1,L4:	Ferrite
L2:	12 nH
L3:	10 nH
C1,C4:	47nF
C2,C7:	2.2pF
C3,C5:	220 pF
C6:	4.7 pF

AWT EXTERNAL TEST CIRCUIT"

This data sheet contains technical information about product ANADIGICS is planning to introduce. The data and product specifications are subject to change prior to formal introduction. Please note: This device is NOT to be used for device qualification or production.

35 Technology Drive, Warren NJ 07059 • (908)-668-5000 • FAX:(908)-668-5068 Email: ANADIGICS@ATTmail.com, 2/16/95-AWT0901 3