



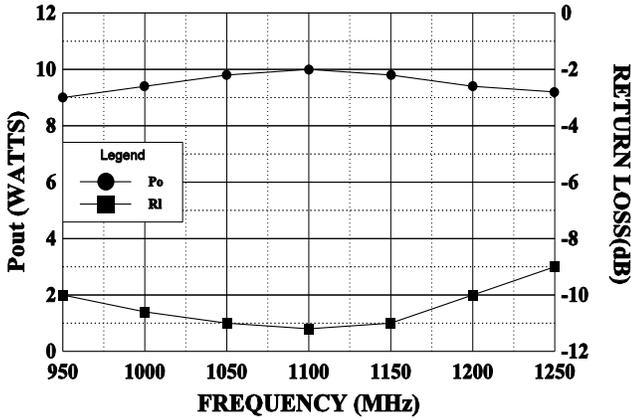


**GHZ TECHNOLOGY**  
RF · MICROWAVE · SILICON POWER TRANSISTORS

0912-7

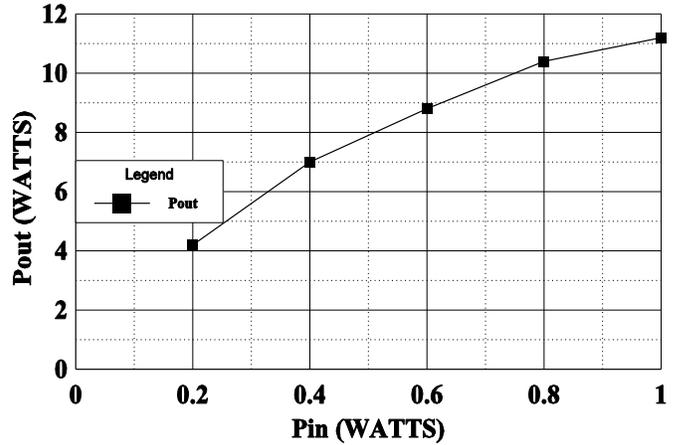
**BROADBAND Pout & RETURN LOSS**

Pin = 1 Watt Pk, Vcc = 50 Volts



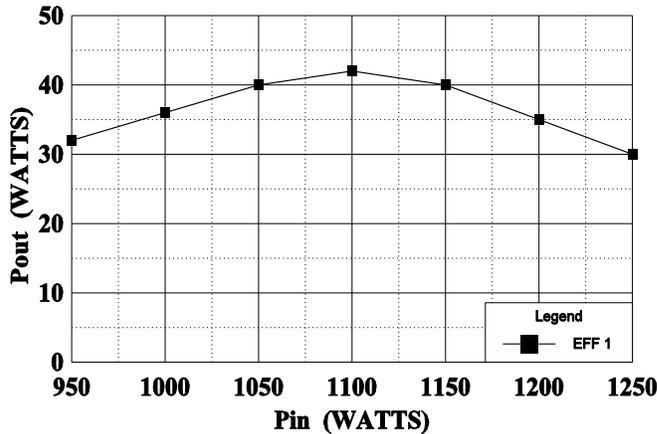
**POWER OUTPUT vs POWER INPUT**

Vcc = 50V, Frequency 1090 MHz



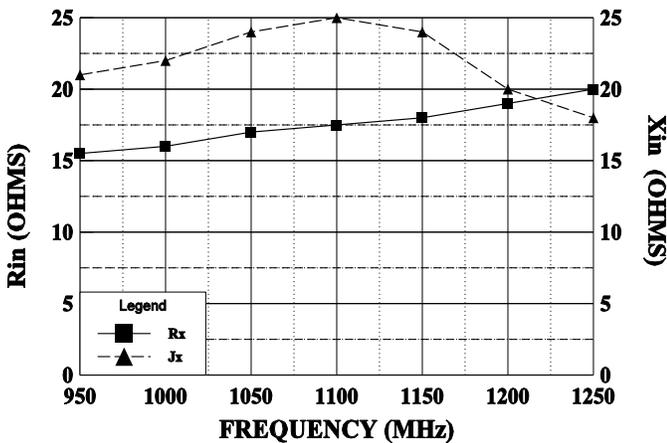
**EFFICIENCY vs FREQUENCY**

Vcc 50 Volts, Pin = 1 Watt



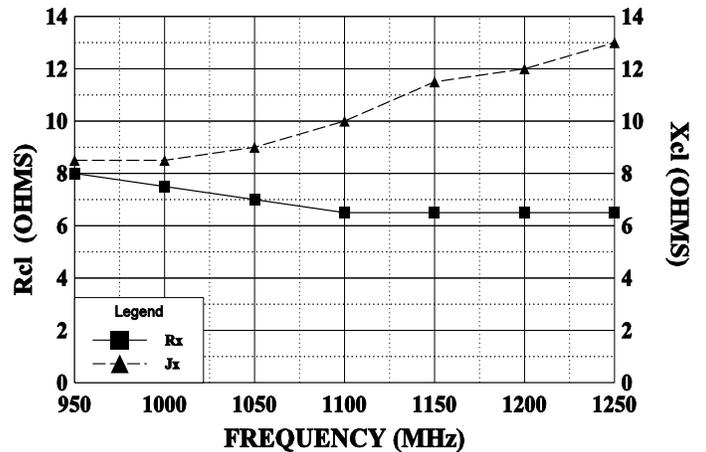
**SERIES INPUT IMPEDANCE vs FREQUENCY**

Vcc = 50 V, Pin = 1 W

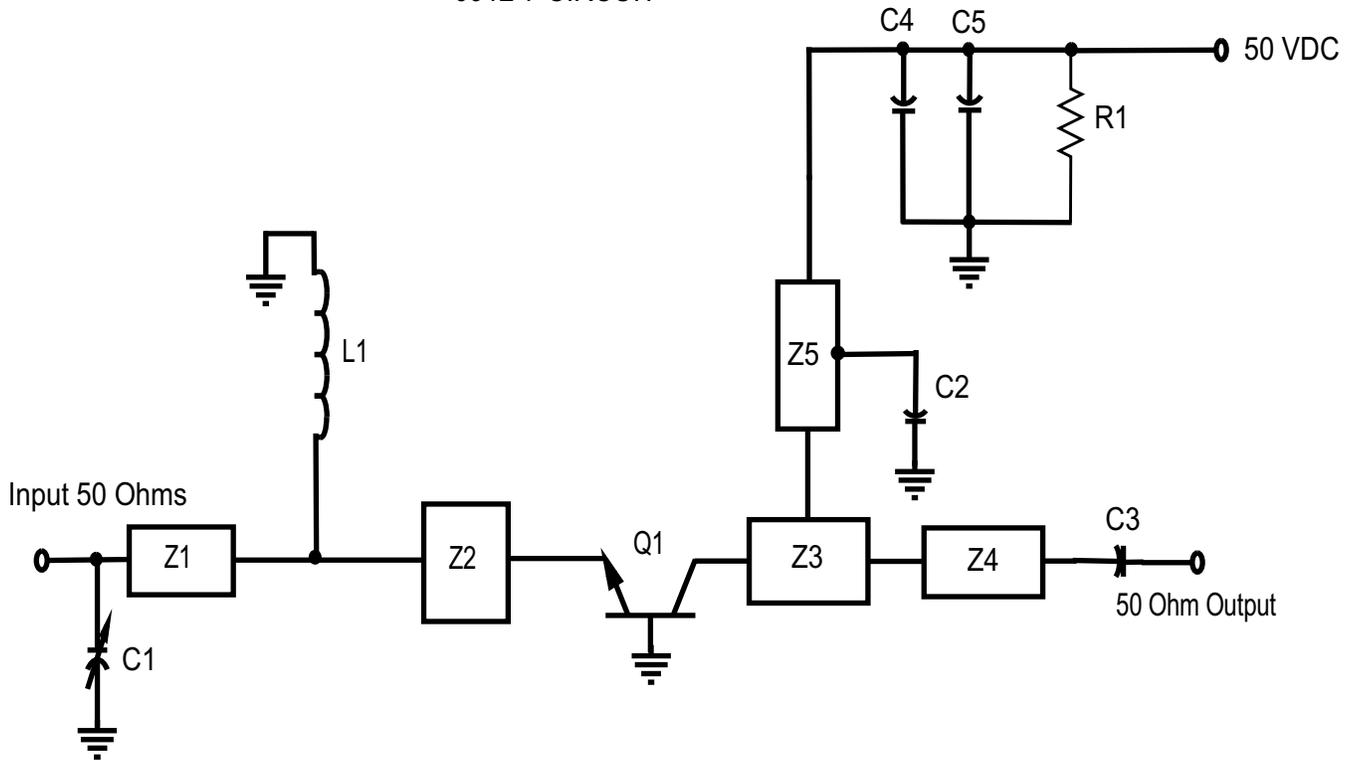


**SERIES LOAD IMPEDANCE vs FREQUENCY**

Vcc = 50 V, Pin = 1W



## 0912-7 CIRCUIT



PC Board Material .010" Dielectric Teflon Fiberglass

Z1=50  $\Omega$ , .062" w X .45"L  
 Z2=5  $\Omega$ , .033" w X .23"L  
 Z3=10  $\Omega$ , .06" w X .40"L  
 Z4=50  $\Omega$  = .027" w X any convenient length  
 Z5=50  $\Omega$ , .12" w X .86"L  
 C1=Capacitor, .35-3.5pF Piston Trimmer  
 C2=Capacitor, 47pF ATC

Note: Slide C2 along Z5 for best tuning  
 C3=Capacitor, 47pF ATC  
 C4=Capacitor, 100 pF ATC  
 C5=Capacitor, 12mfd, 75 VDC, Electrolytic  
 L1=Inductor, #18 wire, 1.5" long  
 R1=Resistor, 10KW, 1/4W  
 Q1=Transistor, GHz 0912-7

All electrical lengths taken at 1.09 GHz