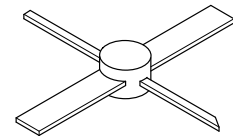
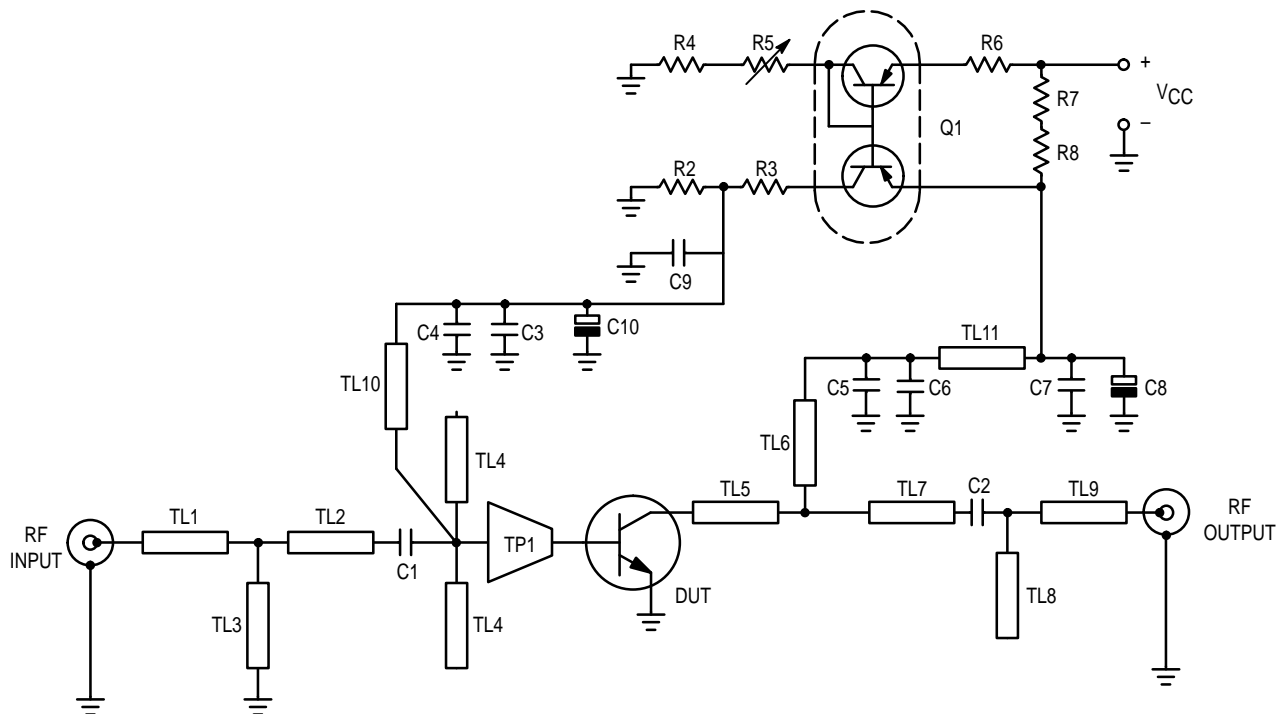


The RF Line  
**NPN Silicon**  
**RF Power Transistor**

**MRF6401**  
**PHOTOMASTER**



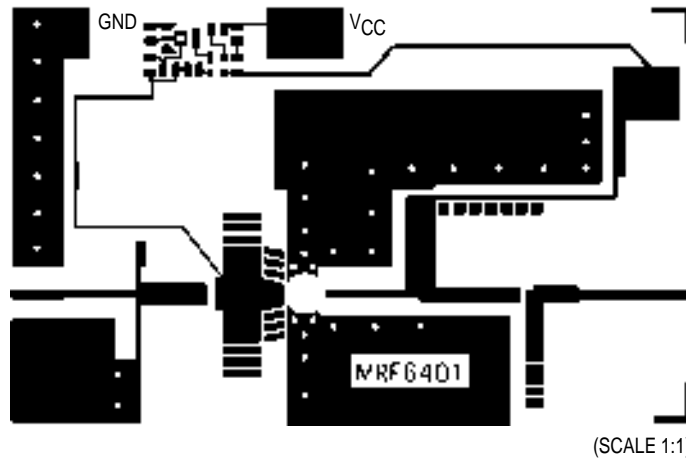
**CASE 305C-02, STYLE 1**  
**SOE200-PILL**



- C1 1.5 pF, ATC Chip Capacitor 100A
- C2 3.9 pF, ATC Chip Capacitor 100A
- C3 56 pF, ATC Chip Capacitor 100A
- C4, C6, C7, C9 15 nF, Chip Capacitor 0805
- C5 47 pF, ATC Chip Capacitor 100A
- C8 4.7  $\mu$ F, 35 V, Capacitor
- C10 10  $\mu$ F, 16 V, Capacitor
- C11 100 pF, ATC Chip Capacitor 100A

- Q1 Transistor, BCV62
- R2 470  $\Omega$ , Chip Resistor 0805
- R3 4.7 k $\Omega$ , Chip Resistor 0805
- R4 8.2 k $\Omega$ , Chip Resistor 0805
- R5 5 k $\Omega$ , SMD Potentiometer
- R6 680  $\Omega$ , Chip Resistor 0805
- R7, R8 7.5  $\Omega$ , Chip Resistor 0805
- TL1 to TL11  $\mu$ Strip Lines; See Photomaster
- TP1  $\mu$ Strip Taper; See Photomaster

**Figure 1. 1600–2000 MHz Broadband Application Amplifier Schematic**



TEFLON<sup>®</sup> GLASS 0.508 MM 2 SIDES 35 μm Cu

Figure 2. PC Board Photomaster

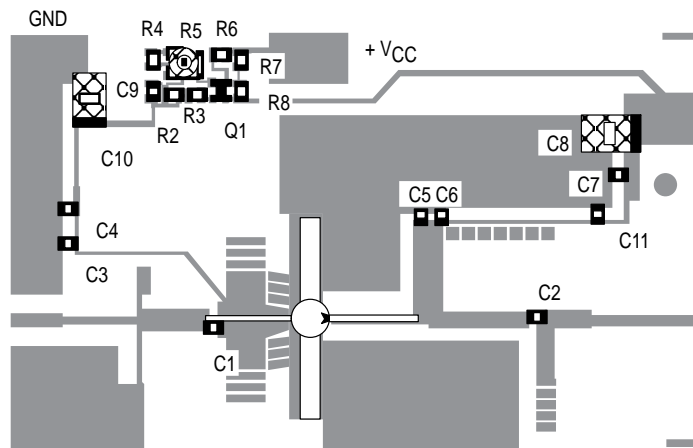
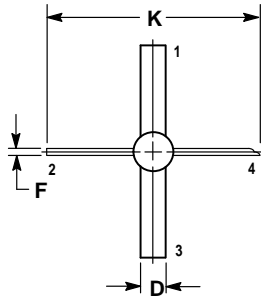


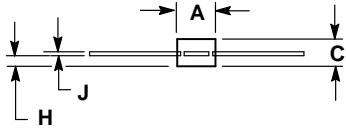
Figure 3. Test Circuit Components Layout

## PACKAGE DIMENSIONS




- NOTES:  
 1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.  
 2. CONTROLLING DIMENSION: INCH.

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.200	0.210	5.08	5.33
C	—	0.125	—	3.17
D	0.120	0.130	3.05	3.30
F	0.025	0.035	0.64	0.88
H	0.035	0.045	0.88	1.14
J	0.004	0.006	0.11	0.15
K	0.970	1.030	24.64	26.16



- STYLE 1:  
 PIN 1. EMITTER  
 2. BASE  
 3. EMITTER  
 4. COLLECTOR

**CASE 305C-02  
 ISSUE A**

Motorola reserves the right to make changes without further notice to any products herein. Motorola makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Motorola assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation consequential or incidental damages. "Typical" parameters can and do vary in different applications. All operating parameters, including "Typicals" must be validated for each customer application by customer's technical experts. Motorola does not convey any license under its patent rights nor the rights of others. Motorola products are not designed, intended, or authorized for use as components in systems intended for surgical implant into the body, or other applications intended to support or sustain life, or for any other application in which the failure of the Motorola product could create a situation where personal injury or death may occur. Should Buyer purchase or use Motorola products for any such unintended or unauthorized application, Buyer shall indemnify and hold Motorola and its officers, employees, subsidiaries, affiliates, and distributors harmless against all claims, costs, damages, and expenses, and reasonable attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized use, even if such claim alleges that Motorola was negligent regarding the design or manufacture of the part. Motorola and  are registered trademarks of Motorola, Inc. Motorola, Inc. is an Equal Opportunity/Affirmative Action Employer.

**How to reach us:**

**USA / EUROPE:** Motorola Literature Distribution;  
P.O. Box 20912; Phoenix, Arizona 85036. 1-800-441-2447

**JAPAN:** Nippon Motorola Ltd.; Tatsumi-SPD-JLDC, Toshikatsu Otsuki,  
6F Seibu-Butsuryu-Center, 3-14-2 Tatsumi Koto-Ku, Tokyo 135, Japan. 03-3521-8315

**MFAX:** RMFAX0@email.sps.mot.com – TOUCHTONE (602) 244-6609  
**INTERNET:** <http://Design-NET.com>

**HONG KONG:** Motorola Semiconductors H.K. Ltd.; 8B Tai Ping Industrial Park,  
51 Ting Kok Road, Tai Po, N.T., Hong Kong. 852-26629298



MRF6401PHT/D

