

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

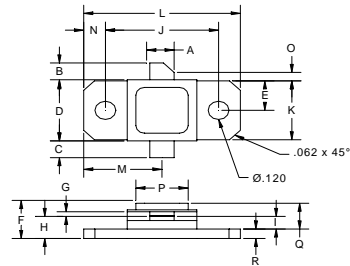
The **ASI MZ0912B50Y** is Designed for General Purpose Class C Power Amplifier Applications up to 1215 MHz.

**FEATURES:**

- $P_G = 7.0$  dB min.at 50 W / 1215 MHz
- Common Base
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

$V_{CE}$	20 V
$V_{CB}$	65 V
$V_{EB}$	3.0 V
$I_C$	3.0 A
$P_{DISS}$	150 W @ $T_C = 25^\circ C$
$T_J$	-65 °C to +200 °C
$T_{STG}$	-65 °C to +200 °C
$\theta_{JC}$	1.16 °C/W

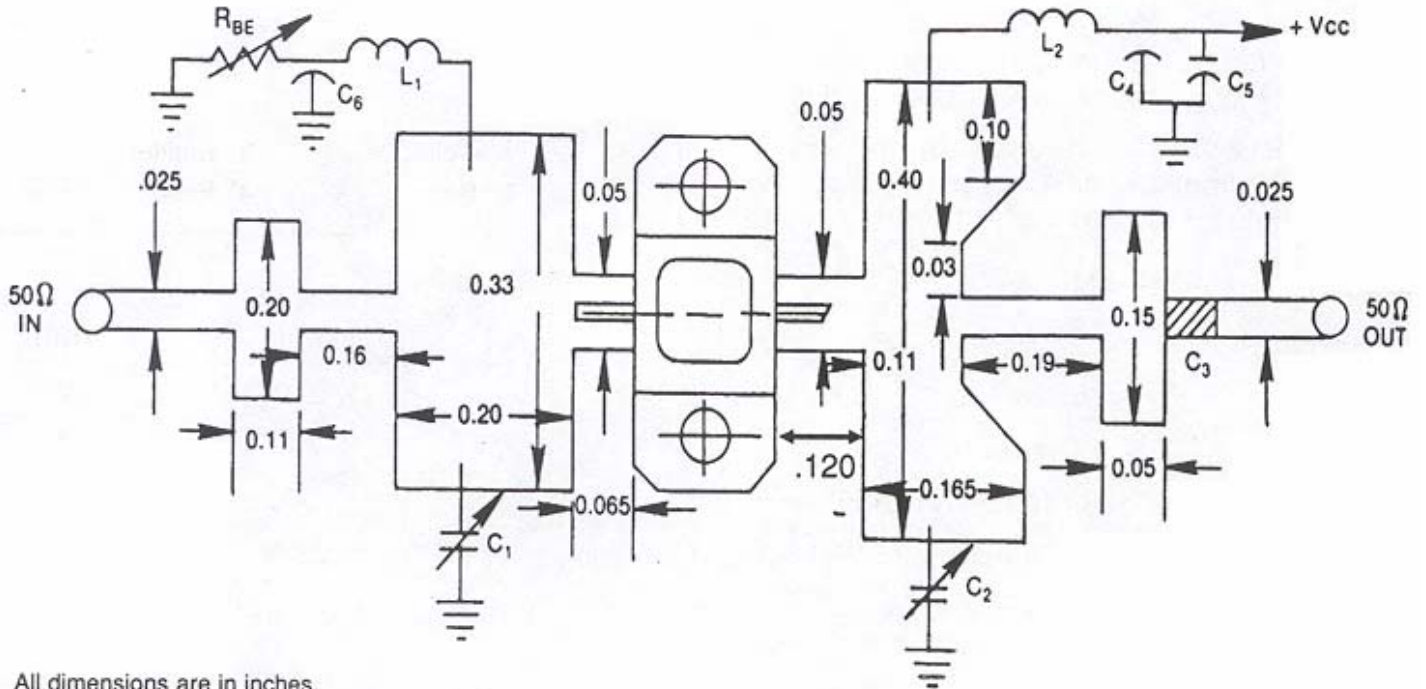
**PACKAGE STYLE .400 2L FLG**


DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.140 / 3.56	
B	.110 / 2.80	
C	.110 / 2.80	
D	.395 / 10.03	.407 / 10.34
E	.193 / 4.90	
F		.230 / 5.84
G	.003 / 0.08	.006 / 0.15
H	.118 / 3.00	.131 / 3.33
I		.063 / 1.60
J		.650 / 16.51
K		.386 / 9.80
L		.900 / 22.86
M		.450 / 11.43
N		.125 / 3.18
O	.050 / 1.27	
P		.405 / 10.29
Q		.170 / 4.32
R		.062 / 1.58

**CHARACTERISTICS**  $T_C = 25^\circ C$ 

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$I_{CBO}$	$V_{CB} = 65$ V			200	mA
$I_{CES}$	$V_{CE} = 60$ V			20	mA
$I_{EBO}$	$V_{EB} = 1.5$ V			200	$\mu A$
$P_G$	$V_{CC} = 50$ $P_{OUT} = 50$ W $f = 960 - 1215$ MHz	7.0			dB
$\eta_c$		42			%

TEST CIRCUIT



All dimensions are in inches.  
Substrate material: .025 thick Al<sub>2</sub>O<sub>3</sub>

C1,C2: 0.3 - 3.5 pF Johanson Capacitors, or Equiv.  
C3 : 100 pF Chip Capacitor  
C4,C6: 1500 pF RF Feedthru

C5 : 100 MF, Electrolytic 50V  
L1,L2 : No. 32 Wire, 4 Turn .062 I.D.  
RBE : 0 - 1.0 Ohm