

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

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

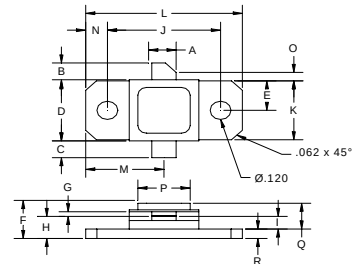
FEATURES:

- $P_G = 7.0$ 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 @ $T_C = 25^\circ\text{C}$
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +200 °C
θ_{JC}	1.16 °C/W

PACKAGE STYLE .400 2L FLG

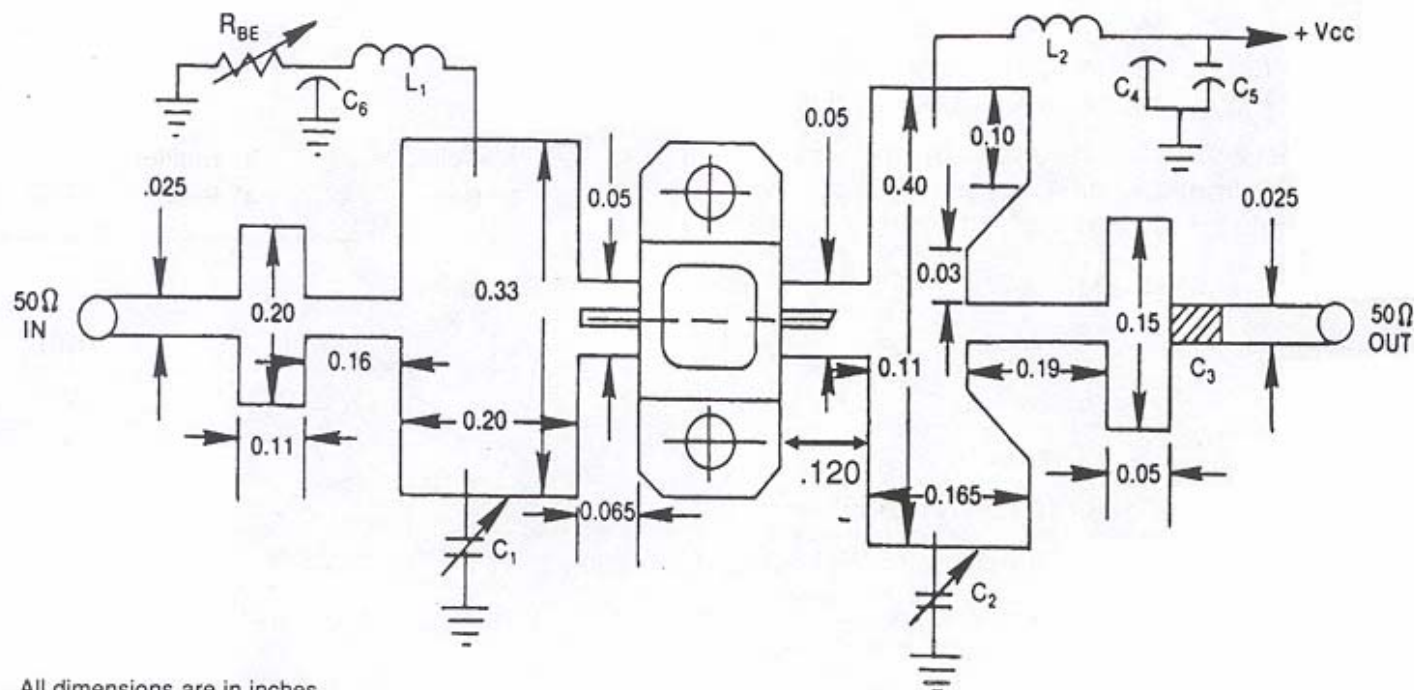


DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A		.140 / 3.56
B		.110 / 2.80
C		.110 / 2.80
D	.395 / 10.03	.407 / 10.34
E		.193 / 4.90
F		.230 / 5.84
G	.003 / 0.08	.006 / 0.15
H	.118 / 3.00	.131 / 3.33
I		.063 / 1.60
J		.650 / 16.51
K		.386 / 9.80
L		.900 / 22.86
M		.450 / 11.43
N		.125 / 3.18
O	.050 /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

CHARACTERISTICS $T_C = 25^\circ\text{C}$

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	μA
P_G η_c	$V_{CC} = 50$ $P_{OUT} = 50$ W $f = 960 - 1215$ MHz	7.0 42			dB %

TEST CIRCUIT



All dimensions are in inches.

Substrate material: .025 thick Al₂O₃

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

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