

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

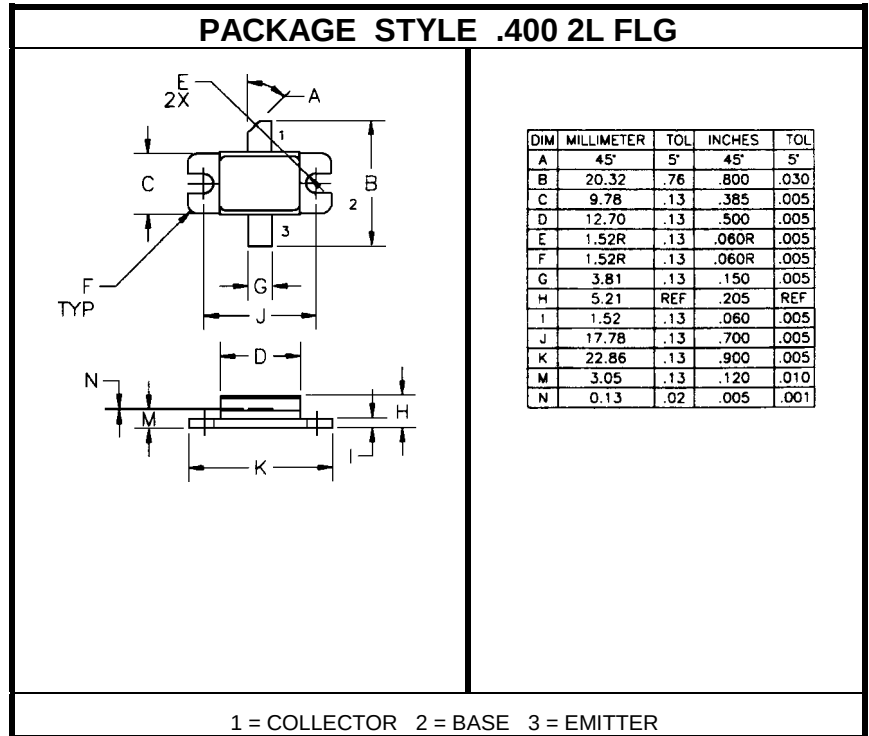
The **ASI MZ0912B50Y** is Designed for General Purpose Class C Power Amplifier Applications up to 1215 MHz.

FEATURES:

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

MAXIMUM RATINGS

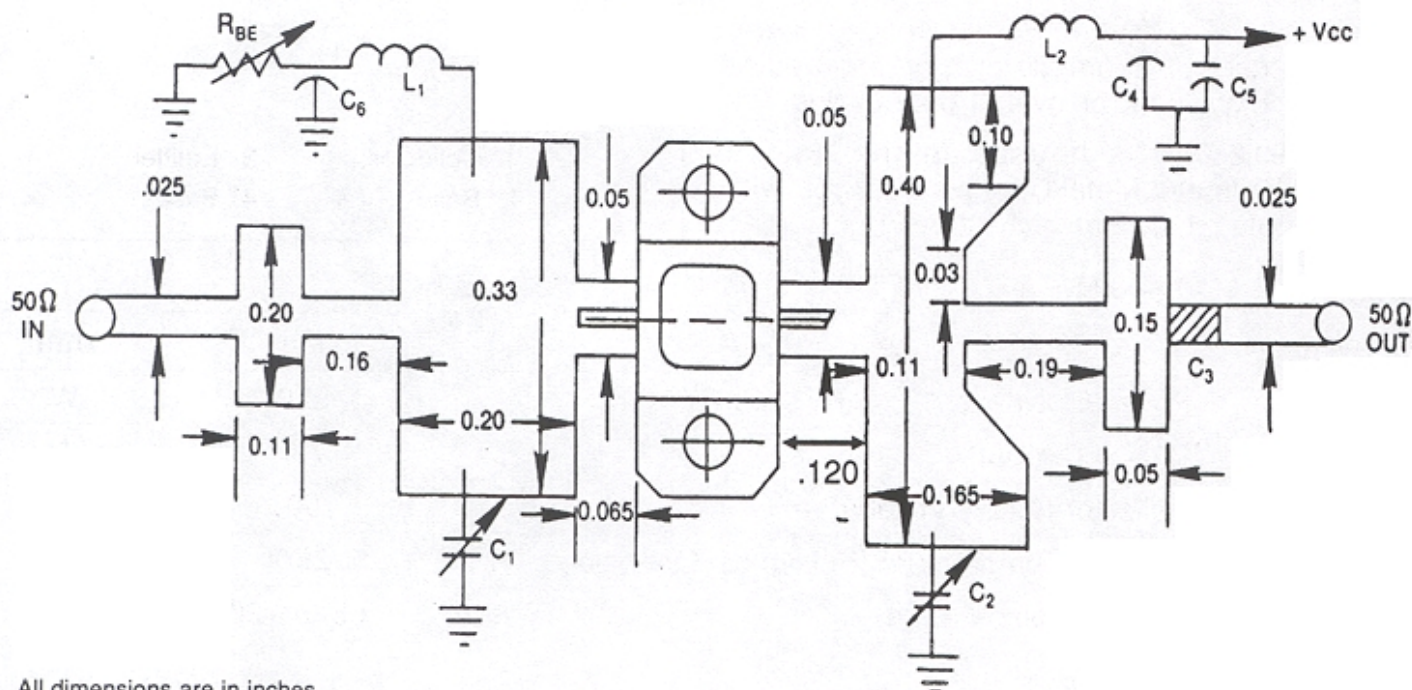
V_{CE}	20 V
V_{CB}	65 V
V_{EB}	3.0 V
I_C	3.0 A
P_{DISS}	150 W @ $T_C = 25^\circ\text{C}$
T_J	-65°C to $+200^\circ\text{C}$
T_{STG}	-65°C to $+200^\circ\text{C}$
θ_{JC}	1.16°C/W



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

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