

New Jersey Semi-Conductor Products, Inc.

20 STERN AVE.
 SPRINGFIELD, NEW JERSEY 07081
 U.S.A.

BLU97

TELEPHONE: (973) 376-2922
 (212) 227-6005
 FAX: (973) 376-8960

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

BLU97 is Designed for Use in Mobile Applications up to 470 MHz.

FEATURES:

- Common Emitter
- $P_G = 8.5$ dB at 7.0 W/470 MHz
- **Omnigold™** Metalization System

MAXIMUM RATINGS

I_C	1.2 A
V_{CBO}	36 V
V_{CEO}	16 V
V_{EBO}	4.0 V
P_{DISS}	22.5 W @ $T_C = 25^\circ C$
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
θ_{JC}	7.5 °C/W

PACKAGE STYLE .280 4L STUD

DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	1.010 / 25.65	1.055 / 26.80
B	.220 / 5.59	.230 / 5.84
C	.270 / 6.86	.285 / 7.24
D	.003 / 0.08	.007 / 0.18
E	.117 / 2.97	.137 / 3.48
F		.572 / 14.53
G		.130 / 3.30
H	.245 / 6.22	.255 / 6.48
I		.640 / 16.26
J	.175 / 4.45	.217 / 5.51
K	.275 / 6.99	.285 / 7.24

CHARACTERISTICS $T_C = 25^\circ C$

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	$I_C = 30$ mA	16			V
BV_{CBO}	$I_C = 15$ mA	36			V
BV_{EBO}	$I_E = 1.5$ mA	3.0			V
I_{CES}	$V_{CE} = 16$ V			7.5	mA
h_{FE}	$V_{CE} = 10$ V $I_C = 900$ mA	10	100	---	---
C_c C_{re}	$V_{CB} = 12.5$ V $f = 1.0$ MHz		10 7.0		pF
f_T	$V_{CB} = 12.5$ V $I_C = 900$ mA $f = 1.0$ MHz		4.0		GHz
P_G η_c	$V_{CC} = 12.5$ V $P_{OUT} = 7.0$ W $f = 470$ MHz	8.5 55			dB %

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