NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI PZ1418B30U** is Designed for Class B broadband Amplifiers under CW conditions, in 1.4 to 1.8 GHz Military Equipment.

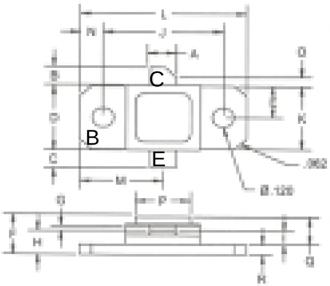
FEATURES:

- Class B Operation
- **P_G** = 7.3 dB at 27 W/1.4-1.8 GHz
- ***Omnigold***™ Metalization System

MAXIMUM RATINGS

I_C	4.0 A
V_{CBO}	40 V
V_{CEO}	15 V
V_{EBO}	3.0 V
P_{DISS}	45 W @ T_C = 25 °C
T_J	+200 °C Max.
T_{STG}	-65 °C to +150 °C
θ_{JC}	4.0 °C/W

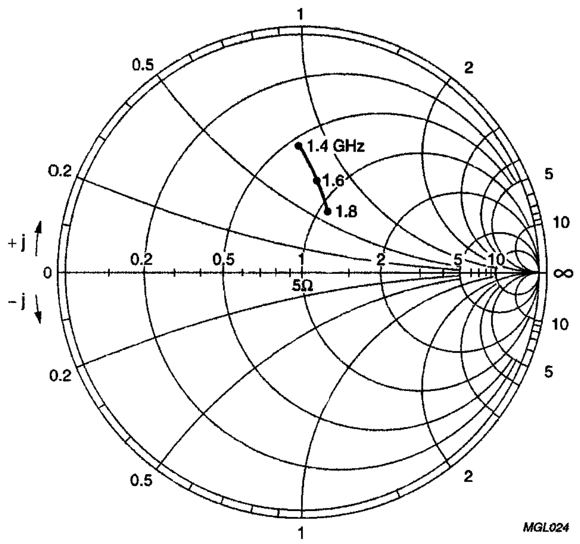
PACKAGE STYLE .400 4L FLG



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	.190 / 4.80	
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	

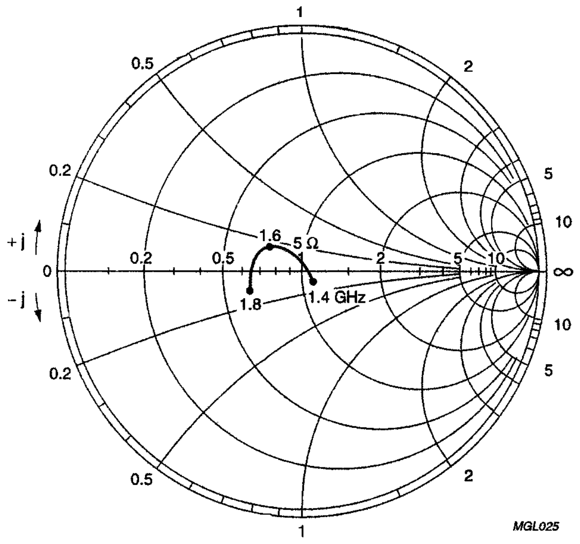
CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CBO}	I_C = 1.0 mA	40			**V**
BV_{CEO}	I_C = 20 mA	15			**V**
BV_{EBO}	I_E = 0.25 mA	3.0			**V**
I_{CBO}	V_{CB} = 30 V V_{CB} = 40 V			5.0 10	**mA**
I_{CES}	V_{CE} = 35 V			50	**mA**
I_{EBO}	V_{EB} = 1.5 V			200	**µA**
P_G **η_D**	V_{CC} = 28 V P_{OUT} = 27 W f = 400 MHz	7.3 38	8.4 45		**dB** **%**



$Z_o = 5\ \Omega$.

Input impedance as a function of frequency; typical values.



$Z_o = 5\ \Omega$.

Optimum load impedance as a function of frequency; typical values.