

# NPN SILICON RF POWER TRANSISTOR

## DESCRIPTION:

The **ASI ALR006** is Designed for  
1200 – 1400 MHz, L-Band Applications.

## FEATURES:

- Internal Input/Output Matching Network
- $P_G = 9.5$  dB at 6.0 W/ 1400 MHz
- **Omnigold™** Metalization System

## MAXIMUM RATINGS

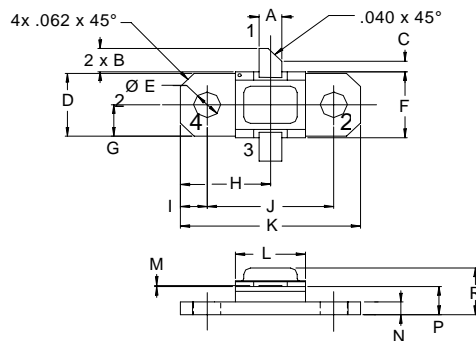
$I_C$	0.82 A
$V_{CC}$	32 V
$P_{DISS}$	16.7 W @ $T_C = 25$ °C
$T_J$	-65 °C to +200 °C
$T_{STG}$	-65 °C to +200 °C
$\theta_{JC}$	9.0 °C/W

## CHARACTERISTICS $T_C = 25$ °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CBO}$	$I_C = 5$ mA	48			V
$BV_{CER}$	$I_C = 5$ mA $R_{BE} = 10$ $\Omega$	48			V
$BV_{EBO}$	$I_E = 1$ mA	3.5			V
$I_{CES}$	$V_{CE} = 28$ V			1.0	mA
$h_{FE}$	$V_{CE} = 5.0$ V $I_C = 500$ mA	30		300	---
$P_G$	$V_{CC} = 28$ V $P_{OUT} = 6.0$ W $f = 1.2$ to 1.4 GHz	9.5			dB
$\eta_c$		47			%

**IMPEDANCE DATA**

FREQ	$Z_{IN} (\Omega)$	$Z_{CL} (\Omega)$
1.2 GHz	$10.5 + j9.0$	$9.0 + j3.0$
1.3 GHz	$6.5 + j8.0$	$6.5 + j2.0$
1.4 GHz	$8.5 + j7.0$	$6.0 + j1.0$

 $P_{in} = 0.55 \text{ W}$ 
 $V_{CC} = 28 \text{ V}$ 
**PACKAGE STYLE .310 2L FLG**


DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.095 / 2.41	.105 / 2.67
B	.100 / 2.54	.120 / 3.05
C	.050 / 1.27	
D	.286 / 7.26	.306 / 7.77
E	.110 / 2.79	.130 / 3.30
F	.306 / 7.77	.318 / 8.08
G	.148 / 3.76	
H	.400 / 10.16	
I	.119 / 3.02	
J	.552 / 14.02	.572 / 14.53
K	.790 / 20.07	.810 / 20.57
L	.300 / 7.62	.320 / 8.13
M	.003 / 0.08	.006 / 0.15
N	.052 / 1.32	.072 / 1.83
P	.118 / 3.00	.131 / 3.33
R		.230 / 5.84

**ORDER CODE: ASI10510**

1 = Collector 2 = Base 3 = Emitter