NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

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

FEATURES:

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

MAXIMUM RATINGS

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

CHARACTERISTICS T_C = 25 °C

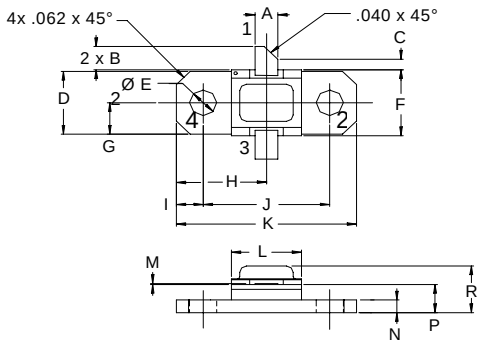
SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$\mathbf{BV_{CBO}}$	I_C = 5 mA	48			**V**
$\mathbf{BV_{CER}}$	I_C = 5 mA R_{BE} = 10 Ω	48			**V**
$\mathbf{BV_{EBO}}$	I_E = 1 mA	3.5			**V**
$\mathbf{I_{CES}}$	V_{CE} = 28 V			1.0	**mA**
$\mathbf{h_{FE}}$	V_{CE} = 5.0 V I_C = 500 mA	30		300	**---**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

IMPEDANCE DATA

FREQ	Z_{IN} (Ω)	Z_{CL} (Ω)
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 W
V_{CC} = 28 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