

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

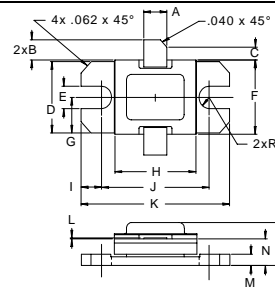
The **ASI ALR175** is common Base transistor Designed for 1215 – 1400 MHz, L-Band Applications.

**FEATURES:**

- Internal Input/Output Matching Network
- $P_G = 7.3$  dB at 30 W/1400 MHz
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

$I_C$	14 A
$V_{CC}$	45 V
$P_{DISS}$	330 W @ $T_C = 25^\circ C$
$T_J$	-65 °C to +250 °C
$T_{STG}$	-65 °C to +200 °C
$\theta_{JC}$	0.45 °C/W

**PACKAGE STYLE .400 2L FLG (A)**


DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.135 / 3.43	.145 / 3.68
B	.100 / 2.54	.120 / 3.05
C	.050 / 1.27	
D	.376 / 9.55	.396 / 10.06
E	.110 / 2.79	.130 / 3.30
F	.395 / 10.03	.407 / 10.34
G		.193 / 4.90
H	.490 / 12.45	.510 / 12.95
I		.100 / 2.54
J	.690 / 17.53	.710 / 18.03
K	.890 / 22.61	.910 / 23.11
L	.003 / 0.08	.006 / 0.18
M	.052 / 1.32	.072 / 1.83
N	.118 / 3.00	.131 / 3.33
P		.230 / 5.84

**CHARACTERISTICS**  $T_C = 25^\circ C$ 

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CBO}$	$I_C = 50$ mA	65			V
$BV_{CES}$	$I_C = 100$ mA	65			V
$BV_{EBO}$	$I_E = 10$ mA	3.5			V
$I_{CES}$	$V_{CE} = 40$ V			25	mA
$h_{FE}$	$V_{CE} = 5.0$ V $I_C = 5.0$ A	15		150	---
$P_G$	$V_{CC} = 40$ V $P_{IN} = 30$ W $f = 1.215$ to $1.4$ GHz	7.3	7.8		dB
$\eta_C$		45	50		%
$P_{OUT}$		160	180		W