

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI AM1214-300** is Designed for 1200 – 1400 MHz, L-Band Applications.

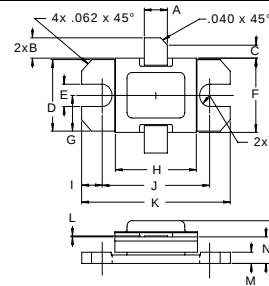
FEATURES:

- Internal Input/Output Matching Network
- Common Base
- $P_G = 6.5$ db at 325 W/1400 MHz
- **Omnigold™** Metalization System

MAXIMUM RATINGS

I_C	18.75 A
V_{CC}	55 V
P_{DISS}	730 W @ $T_C = 25^\circ\text{C}$
T_J	-65 °C to +250 °C
T_{STG}	-65 °C to +200 °C
θ_{JC}	0.24 °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 $T_C = 25^\circ\text{C}$

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CBO}	$I_C = 50$ mA	65			V
BV_{CES}	$I_C = 50$ mA	65			V
BV_{EBO}	$I_E = 15$ mA	3.0			V
I_{CES}	$V_{CE} = 50$ V			30	mA
h_{FE}	$V_{CE} = 5.0$ V $I_C = 5.0$ A	10		---	---
P_G		6.3	6.8		dB
η_c	$V_{CC} = 50$ V $P_{IN} = 63$ W $f = 1235$ to 1365 MHz	40	45		%
P_{OUT}		270	300		W

Conditions: Pulse Width = 50 μ S Duty Cycle = 4%

FREQ	$Z_{IN} (\Omega)$	$Z_{CL} (\Omega)$
1235 MHz	$2.5 + j5.0$	$2.0 - j2.5$
1300 MHz	$1.5 + j3.5$	$2.5 - j2.5$
1365 MHz	$1.0 + j3.5$	$2.0 - j3.0$

TEST CIRCUIT

