NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI 2SC2904** is a silicon epitaxial plana type transistor designed for high power amplifiers in HF band.

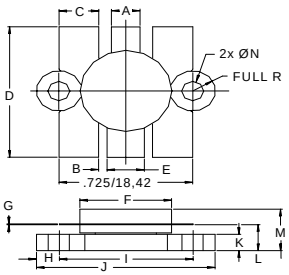
FEATURES:

- Internal Input Matching Network
- P_G = 11.5 dB at 1000 W/30 MHz
- ***Omnigold***™ Metalization System

MAXIMUM RATINGS

I_C	22 A
V_{CBO}	50 V
V_{CEO}	20 V
V_{EBO}	4.0 V
P_{DISS}	200 W @ T_C = 25 °C
T_J	-55 °C to +175 °C
T_{STG}	-55 °C to +175 °C
θ_{JC}	0.75 °C/W

PACKAGE STYLE .500 6L FLG



DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.150 / 3.43	.160 / 4.06
B	.045 / 1.14	
C	.210 / 5.33	.220 / 5.59
D	.835 / 21.21	.865 / 21.97
E	.200 / 5.08	.210 / 5.33
F	.490 / 12.45	.510 / 12.95
G	.003 / 0.08	.007 / 0.18
H	.125 / 3.18	
I	.725 / 18.42	
J	.970 / 24.64	.980 / 24.89
K	.090 / 2.29	.105 / 2.67
L	.150 / 3.81	.170 / 4.32
M		.285 / 7.24
N	.120 / 3.05	.135 / 3.43

Common Emitter configuration

CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CBO}	I_C = 20 mA	50			V
BV_{CEO}	I_C = 100 mA	20			
BV_{EBO}	I_E = 20 mA	4.0			V
I_{CBO}	V_{CB} = 15 V			5.0	mA
I_{EBO}	V_{CB} = 3.0 V			5.0	mA
h_{FE}*	V_{CE} = 10 V I_C = 1.0 A	10		180	---
P_O η_C	V_{CE} = 12.5 V P_{IN} = 7.0 W f = 30 MHz	100 55	110 60		W %

NOTE: *Pulse test, PW=150µS. duty=5%