

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

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

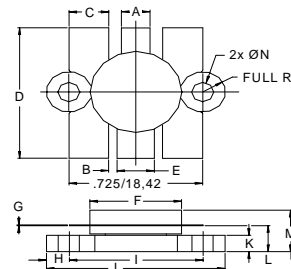
FEATURES:

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

MAXIMUM RATINGS

I_C	22 A
V_{CB0}	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_{CB0}	$I_C = 20$ mA	50			V
BV_{CEO}	$I_C = 100$ mA	20			
BV_{EBO}	$I_E = 20$ mA	4.0			V
I_{CB0}	$V_{CB} = 15$ 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	$V_{CE} = 12.5$ V $P_{IN} = 7.0$ W $f = 30$ MHz	100	110		W
η_c		55	60		%

NOTE: *Pulse test, PW=150µS. duty=5%