

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI TH416** is a 28 V epitaxial planar transistor primarily designed for SSB communications.

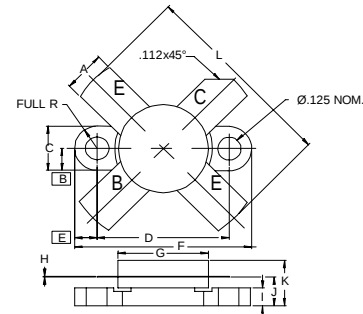
FEATURES:

- $P_G = 12$ dB min. at 130 W/30 MHz
- $IMD = -30$ dBc max. at 130 W (PEP)
- **Omnigold™** Metalization System
- Emitter Ballasting

MAXIMUM RATINGS

I_C	12 A
V_{CBO}	70 V
V_{CEO}	35 V
V_{EBO}	4.0 V
P_{DISS}	175 W @ $T_C = 25^\circ C$
T_J	$-65^\circ C$ to $+200^\circ C$
T_{STG}	$-65^\circ C$ to $+150^\circ C$
θ_{JC}	1.0 $^\circ C/W$

PACKAGE STYLE .500 4L FLG



DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.220 / 5.59	.230 / 5.84
B	.125 / 3.18	
C	.245 / 6.22	.255 / 6.48
D	.720 / 18.28	.730 / 18.54
E	.125 / 3.18	
F	.970 / 24.64	.980 / 24.89
G	.495 / 12.57	.505 / 12.83
H	.003 / 0.08	.007 / 0.18
I	.090 / 2.29	.110 / 2.79
J	.150 / 3.81	.175 / 4.45
K		.280 / 7.11
L	.980 / 24.89	1.050 / 26.67

CHARACTERISTICS $T_C = 25^\circ C$

SYMBOL	TEST CONDITIONS		MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	$I_C = 100$ mA		35			V
BV_{CES}	$I_C = 50$ mA		70			V
BV_{EBO}	$I_E = 20$ mA		4.0			V
I_{CES}	$V_{CE} = 35$ V				20	mA
h_{FE}	$V_{CE} = 5.0$ V	$I_C = 7.0$ A	20		50	---
C_{ob}	$V_{CB} = 28$ V	$f = 1.0$ MHz	---	220	---	pF
G_p	$V_{CE} = 28$	$P_{PUT} = 130$ W	12			dB
IMD	$f = 30.000$ MHz	$I_{CQ} = 150$ mA			-30	dBc