



S100-28

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI 100-28** is designed for HF linear applications up to 30 MHz.

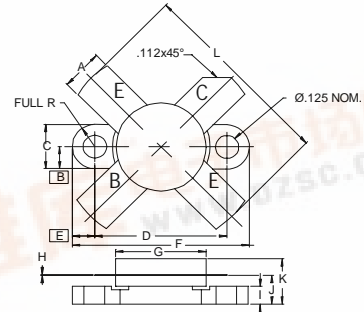
FEATURES:

- $P_G = 16$ dB min. at 100 W/30 MHz
- High linear power output
- **IMD** = -32 dBc max. at 100 W(PEP)
- **Omnigold™** Metalization System

MAXIMUM RATINGS

I_C	20 A
V_{CES}	70 V
V_{CEO}	33 V
V_{EBO}	4.0 V
P_{DISS}	250 W @ $T_C = 25^\circ C$
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
θ_{JC}	0.7 °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}	$I_C = 50$ mA	33			V
BV_{CES}	$I_C = 100$ mA	70			V
BV_{EBO}	$I_E = 5.0$ mA	4.0			V
I_{CES}	$V_{CE} = 28$ V			30	mA
h_{FE}	$V_{CE} = 5.0$ V $I_C = 10$ A	10		100	---
C_{ob}	$V_{CB} = 28$ V $f = 1.0$ MHz	---	270	---	pF
G_P	$V_{CE} = 28$ V $P_{IN} = 2.5$ W $f = 30$ MHz	16			dB
η_c		65			%
VSWR				$\infty:1$	---
IMD	$P_{OUT} = 100$ W (PEP)			-32	dBc

