

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI S175-28** is a 28 V high power transistor designed for linear HF applications. The device utilizes emitter ballasting for ruggedness.

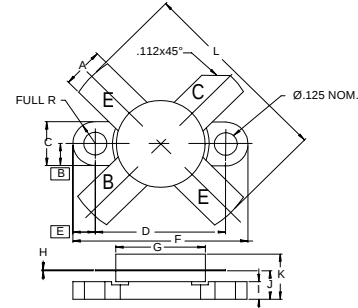
FEATURES:

- $P_G = 14$ dB min. at 175 W/30 MHz
- $IMD = -32$ dBc max. at 175 W_(PEP)
- **Omnigold™** Metalization System
- Common Emitter configuration

MAXIMUM RATINGS

I_C	30 A
V_{CES}	60 V
V_{EBO}	3.5 V
P_{DISS}	320 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}	$0.55^\circ C/W$

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_{CES}	$I_C = 100$ mA	60			V
BV_{CEO}	$I_C = 50$ mA	33			V
BV_{EBO}	$I_E = 10$ mA	3.5			V
h_{FE}	$V_{CE} = 5.0$ V $I_C = 1.0$ A	10			---
G_p	$V_{CE} = 28$ V $P_{OUT} = 175$ W(PEP) $f = 30$ MHz $P_{IN} = 7.0$ W	14	65	-32 30:1	dB
IMD					dBc
η_c					%
VSWR					---