

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

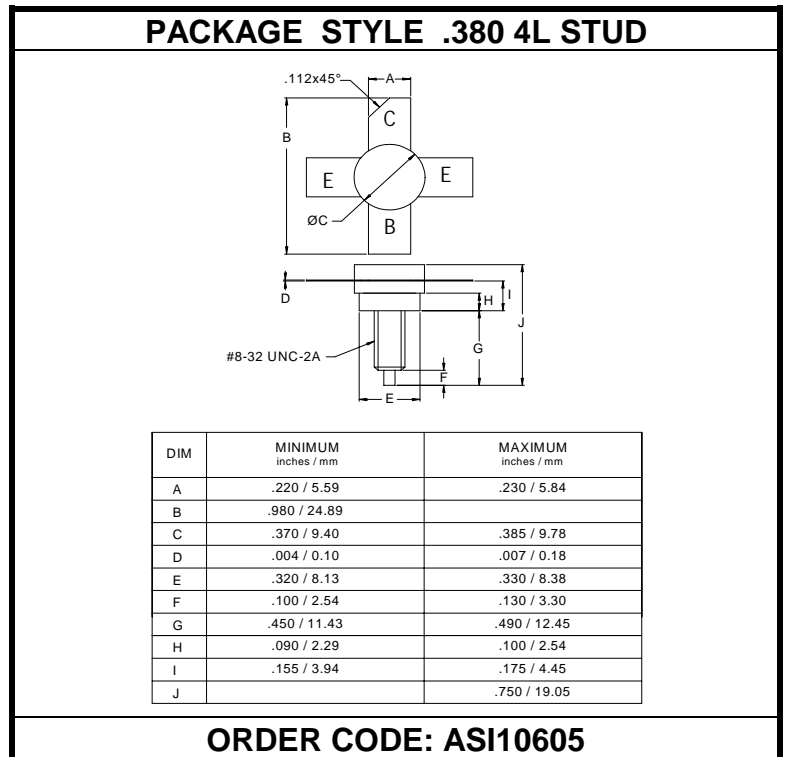
The **ASI HF30-28S** is a 28 V epitaxial RF NPN planar transistor designed primarily for SSB communications. The device utilizes emitter ballasting for improved ruggedness and reliability.

FEATURES:

- $P_G = 20$ dB min. at 30 W/30 MHz
- $IMD_3 = -30$ dBc max. at 30 W(PEP)
- **Omnigold™** Metalization System

MAXIMUM RATINGS

I_C	5.0 A
V_{CB}	65 V
V_{CE}	35 V
V_{EBO}	4.0 V
P_{DISS}	60 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}	2.9 $^\circ C/W$


CHARACTERISTICS $T_C = 25^\circ C$

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CBO}	$I_C = 10$ mA	65		---	V
BV_{CES}	$I_C = 200$ mA	65		---	V
BV_{CEO}	$I_C = 200$ mA	35		---	V
BV_{EBO}	$I_E = 10$ mA	4.0		---	V
I_{CES}	$V_{CE} = 30$ V	---		10	mA
I_{CBO}	$V_{CE} = 30$ V	---		100	mA
h_{FE}	$V_{CE} = 5.0$ V $I_C = 500$ mA	5.0		200	---
C_{OB}	$V_{CB} = 30$ V $f = 1.0$ MHz	---		65	pF



G_P η_c IMD₃	V _{CE} = 28 V P _{OUT} = 30 W(PEP)	P _{IN} = 0.48 W	f = 30 MHz	718 60			-28	dB % dBc
--	--	--------------------------	------------	-----------	--	--	-----	-------------------------------------