

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

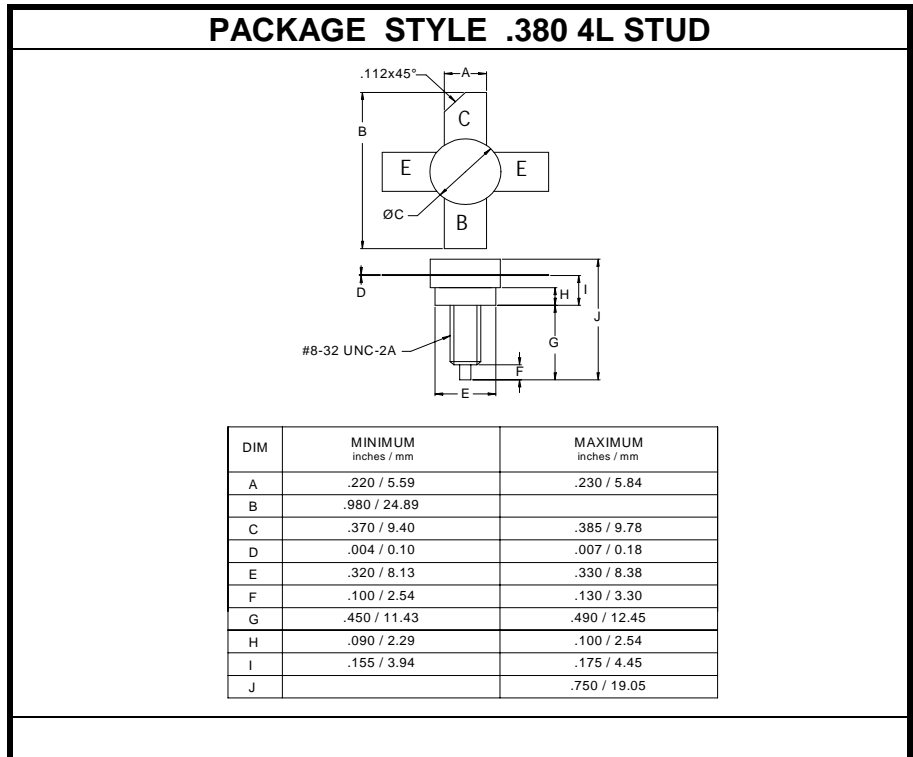
The **ASI 2N5643** is Designed for wideband large-signal amplifier stages in the 125 – 175 MHz range.

FEATURES:

- Minimum Gain = 7.6 dB
- Output Power = 40 W
- **OmniGold™** Metalization System

MAXIMUM RATINGS

I_C	5.0 A
V_{CB0}	65 V
V_{CEO}	35 V
V_{EBO}	4.0 V
P_{DISS}	60 W @ T _C = 25 °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +200 °C
θ_{JC}	2.9 °C/W


CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	I _C = 200 mA			35			V
BV_{CES}	I _C = 200 mA			65			V
BV_{EBO}	I _E = 10 mA			4.0			V
I_{CB0}	V _{CB} = 30 V					1.0	mA
h_{FE}	V _{CE} = 5.0 V	I _C = 500 mA		5.0		---	---
C_{OB}	V _{CB} = 30 V	f = 1.0 MHz			45	65	pF
G_P	V _{CE} = 28 V	P _{OUT} = 40 W	f = 175 MHz	7.6	8.1	---	dB
η_C	V _{CE} = 10 V	I _C = 200 mA	f = 100 MHz		60		%