NPN SILICON RF POWER TRANSISTOR

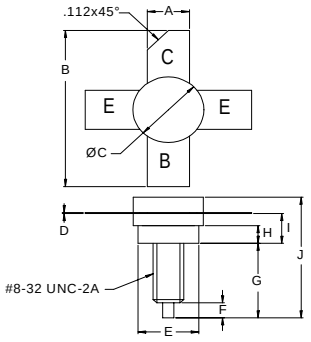
DESCRIPTION:

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

PACKAGE STYLE .380 4L STUD



DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.220 / 5.59	.230 / 5.84
B	.980 / 24.89	
C	.370 / 9.40	.385 / 9.78
D	.004 / 0.10	.007 / 0.18
E	.320 / 8.13	.330 / 8.38
F	.100 / 2.54	.130 / 3.30
G	.450 / 11.43	.490 / 12.45
H	.090 / 2.29	.100 / 2.54
I	.155 / 3.94	.175 / 4.45
J		.750 / 19.05

MAXIMUM RATINGS

I_C	5.0 A
V_{CBO}	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_{CBO}	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		%