

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

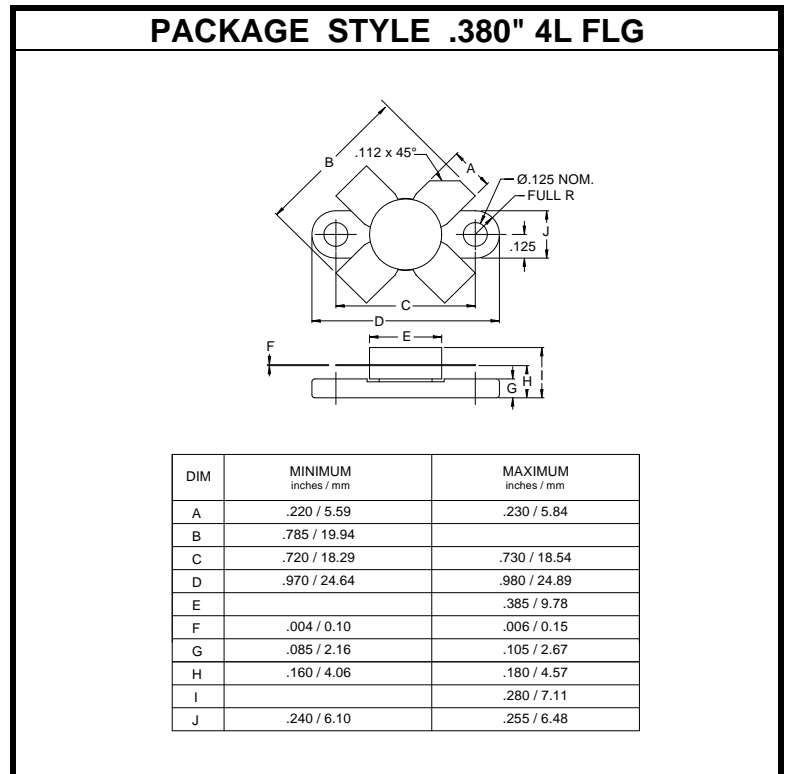
The **2SC1946A** is Designed for 12.5 V 175 MHz Large-Signal Power Amplifier Applications.

FEATURES INCLUDE:

- High Common Emitter Power Gain
- Output Power = 30 W

MAXIMUM RATINGS

I_C	8.0 A
V_{CE}	16 V
V_{CB}	36 V
P_{DISS}	100 W @ T _C = 25 °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
θ_{JC}	1.75 °C/W


CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CES}	I _C = 25 mA	36			V
BV_{CEO}	I _C = 25 mA	16			V
BV_{EBO}	I _E = 5.0 mA	4.0			V
I_{CES}	V _{CE} = 15 V			5.0	mA
h_{FE}	V _{CE} = 5.0 V I _C = 1.0 A	40	75	150	---
C_{ob}	V _{CB} = 15 V f = 1.0 MHz		75	100	pF
G_{PE} η	V _{CC} = 12.5 V P _{out} = 30 W f = 175 MHz	10 60	11 70		DB %
ψ	V _{CC} = 15.5 V P _{IN} = 2.0 dB Overdrive Load VSWR = 30:1 ALL PHASE ANGLES	No Degradation in Power Output			