

DESCRIPTION:

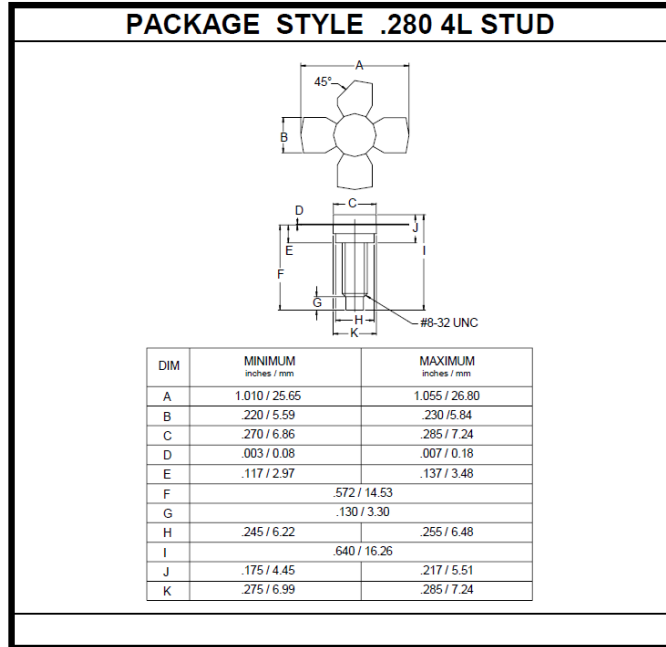
The **2N4429** is Designed for Class C Amplifier Applications Up to 1,000 MHz.

FEATURES:

- $P_G = 7.5$ dB Typ. at 1.0 W/1000 MHz
- Emitter Ballasting for Ruggedness

MAXIMUM RATINGS

I_C	1.0 A
V_{CB}	45 V
P_{DISS}	7.0 W @ $T_C = 25^\circ C$
T_J	-65 to +200 $^\circ C$
T_{STG}	-65 to +150 $^\circ C$
θ_{JC}	25 $^\circ C/W$



CHARACTERISTICS $T_C = 25^\circ C$

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CBO}	$I_C = 1$ mA	45			V
BV_{CER}	$I_C = 20$ mA $R_{BE} = 10 \Omega$	45			V
BV_{EBO}	$I_E = 1$ mA	3.5			V
I_{CBO}	$V_{CE} = 28$ V			250	μA
h_{FE}	$V_{CE} = 5.0$ V $I_C = 100$ mA	15		150	---
F_t	$V_{CE} = 20$ V $I_C = 100$ mA	600			MHz
C_{ob}	$V_{CB} = 28$ V $f = 1.0$ MHz			5.0	pF
P_G	$V_{CE} = 28$ V $P_{OUT} = 5.0$ W $f = 1,000$ MHz	6.5	7.5		dB
η_C		40	50		%



TABLE #1 Measured S-Parameter Data

Transistor: 2N4429			Bias: $V_{CE} = 24v$ $I_E = 50ma$					
260	.7	-180	.03	80	2.8	75	.57	-28
350	.7	163	.04	83	2.55	62	.58	-34
400	.71	158	.05	84	2.25	55	.58	-38
500	.75	150	.07	86	1.75	45	.59	-43



IMMITTANCE CHART

FORM 2192

IMPEDANCE COORDINATES — 50 OHM CHAR. TERIS 10 IMPEDANCE
 ADMITTANCE COORDINATES — 20 MILLIMHO CHARACTERISTIC ADMITTANCE

