

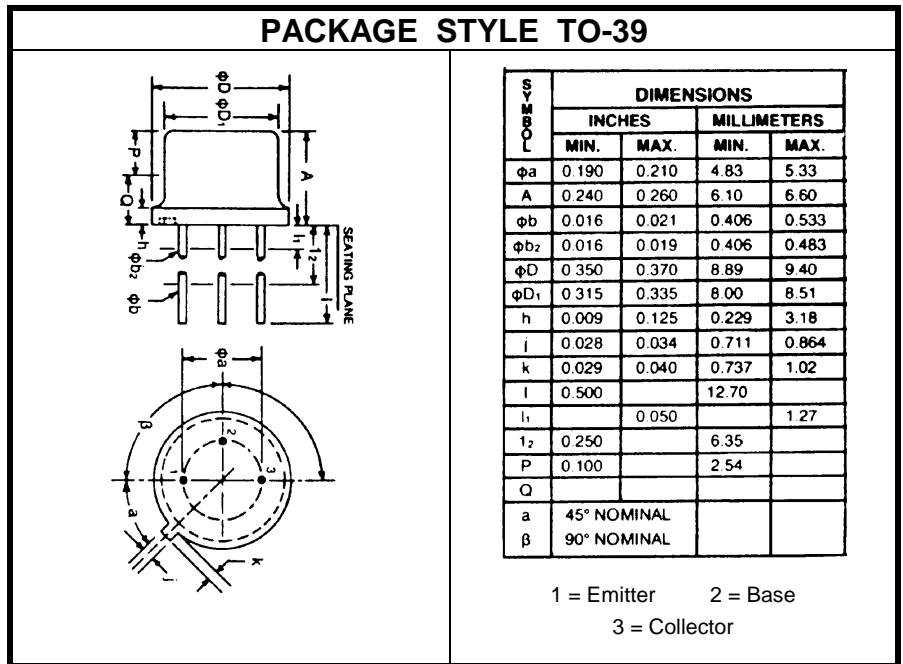
NPN SILICON HIGH FREQUENCY TRANSISTOR

DESCRIPTION:

The **2N3866A** is a High Frequency Transistor Designed for Amplifier and Oscillator Applications.

MAXIMUM RATINGS

I_C	400 mA
V_{CE}	30 V
P_{DISS}	5.0 W @ $T_C = 25^\circ C$
T_J	$-65^\circ C$ to $+200^\circ C$
T_{STG}	$-65^\circ C$ to $+200^\circ C$
θ_{JC}	35 $^\circ C/W$



CHARACTERISTICS $T_C = 25^\circ C$

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	$I_C = 5.0 \text{ mA}$			30			V
BV_{CER}	$I_C = 5.0 \text{ mA}$	$R_{BE} = 10 \Omega$		55			V
BV_{EBO}	$I_C = 100 \mu A$			3.5			V
I_{CEX}	$V_{CE} = 55 \text{ V}$	$V_{BE} = -1.5 \text{ V}$				100	μA
	$V_{CE} = 30 \text{ V}$	$V_{BE} = -1.5 \text{ V}$		$T_C = 200^\circ C$		500	
I_{CEO}	$V_{CE} = 28 \text{ V}$						
I_{EBO}	$V_{EB} = 3.5 \text{ V}$					100	μA
h_{FE}	$V_{CE} = 5.0 \text{ V}$	$I_C = 50 \text{ mA}$		25		200	---
		$I_C = 360 \text{ mA}$		5.0			
$V_{CE(SAT)}$	$I_C = 100 \text{ mA}$	$I_B = 20 \text{ mA}$				1.0	V
f_t	$V_{CE} = 15 \text{ V}$	$I_C = 50 \text{ mA}$	$f = 200 \text{ MHz}$	800			MHz
C_{OB}	$V_{CB} = 28 \text{ V}$		$f = 1.0 \text{ MHz}$			3.0	pF
G_{PE}	$V_{CC} = 28 \text{ V}$	$P_{out} = 1.0 \text{ W}$	$f = 400 \text{ MHz}$	10			dB
η_c				45			%