NPN SILICON HIGH FREQUENCY TRANSISTOR

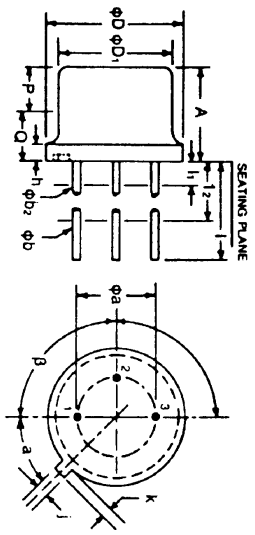
DESCRIPTION:

The **ASI 2N3866** 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 °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +200 °C
θ_{JC}	35 °C/W

PACKAGE STYLE TO-39



SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN.	MAX.	MIN.	MAX.
Φa	0.190	0.210	4.83	5.33
A	0.240	0.260	6.10	6.60
Φb	0.016	0.021	0.406	0.533
Φb2	0.016	0.019	0.406	0.483
ΦD	0.350	0.370	8.89	9.40
ΦD1	0.315	0.335	8.00	8.51
h	0.009	0.125	0.229	3.18
j	0.028	0.034	0.711	0.864
k	0.029	0.040	0.737	1.02
l	0.500		12.70	
l1		0.050		1.27
l2	0.250		6.35	
P	0.100		2.54	
Q				
a	45° NOMINAL			
β	90° NOMINAL			

1 = Emitter 2 = Base
3 = Collector

CHARACTERISTICS T_C = 25 °C

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