



NPN SILICON HIGH FREQUENCY TRANSISTOR

DESCRIPTION:

The **TP2314** is a High Frequency Transistor Designed for Large Signal Power Amplifier Applications, With Emitter Grounded to Case.

MAXIMUM RATINGS

I	1.0 A
V	18 V
P_{DISS}	8.0 W @ T _C = 25 °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +200 °C
q_{JC}	22 °C/W

PACKAGE STYLE TO-39 (CE)				
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
φb ₂	0.016	0.019	0.406	0.483
φD	0.350	0.370	8.89	9.40
φD ₁	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	
l ₁		0.050		1.27
l ₂	0.250		6.35	
P	0.100		2.54	
Q				
a	45° NOMINAL			
β	90° NOMINAL			

1 = COLLECTOR 2 = BASE
3 = EMITTER

CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	I _C = 10 mA	18			V
BV_{CES}	I _C = 5.0 mA	36			V
BV_{CBO}	I _C = 5.0 mA	36			V
I_{CBO}	V _{CB} = 15 V			250	mA
BV_{EBO}	I _E = 1.0 mA	4.0			V
h_{FE}	V _{CE} = 5.0 V I _C = 250 mA	5.0			---
C_{ob}	V _{CB} = 15 V f = 1.0 MHz			20	pF
G_{PE} h	V _{CC} = 12.5 V P _{out} = 40 W f = 175 MHz	50		0.1	W %