

NPN SILICON HIGH FREQUENCY TRANSISTOR

DESCRIPTION:

The **2N4428** is a High Frequency Transistor Designed for Amplifier and Oscillator Applications.

MAXIMUM RATINGS

I_C	425 mA
V_{CE}	30 V
P_{DISS}	3.5 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}	50 $^\circ C/W$

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
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 = EMITTER 2 = BASE
3 = COLLECTOR

CHARACTERISTICS $T_C = 25^\circ C$

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	$I_C = 20$ mA	35			V
BV_{CER}	$I_C = 20$ mA $R_{BE} = 10 \Omega$	55			V
BV_{EBO}	$I_C = 100 \mu A$	3.5			V
I_{CEX}	$V_{CE} = 55$ V $V_{BE} = -1.5$ V			1.0	mA
h_{FE}	$V_{CE} = 5.0$ V $I_C = 50$ mA $I_C = 400$ mA	20 5.0		200	---
f_t	$V_{CE} = 20$ V $I_C = 50$ mA $f = 200$ MHz	700	1000		MHz
C_{OB}	$V_{CB} = 28$ V $f = 1.0$ MHz		1.5	3.5	pF
P_{in} η	$V_{CC} = 28$ V $f = 200$ MHz $P_{out} = 750$ mW $R_s = 50 \Omega$	35		75	mW %

This datasheet has been downloaded from:

www.DatasheetCatalog.com

Datasheets for electronic components.



LittleDiode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

LittleDiode.com

Looking forward to providing you with the best possible service.