2N3114

NPN SILICON TRANSISTOR



TO-39 CASE

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR 2N3114 is a NPN Silicon Transistor, mounted in a hermetically sealed package, designed for general purpose amplifier applications.

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: (T_A=25°C unless otherwise noted)

	SYMBOL		UNITS
Collector-Base Voltage	V_{CBO}	150	V
Collector-Emitter Voltage	V_{CEO}	150	V
Emitter-Base Voltage	V_{EBO}	5.0	V
Continuous Collector Current	I_C	200	mA
Power Dissipation	P_D	0.8	W
Power Dissipation (T_C=25°C)	P_D	5.0	W
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +200	°C

ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

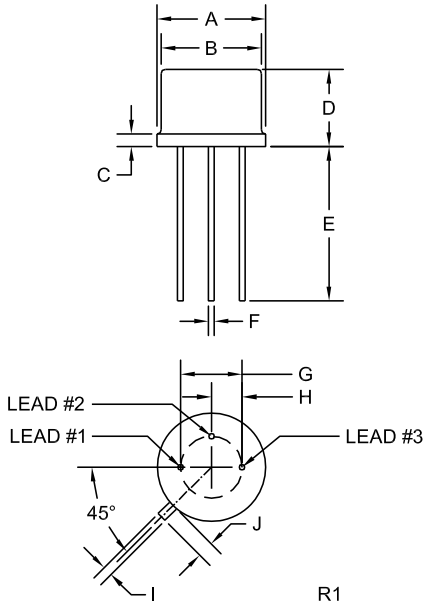
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{CBO}	V_{CB}=100V		10	nA
I_{CBO}	V_{CB}=100V, T_A=150°C		10	µA
I_{EBO}	V_{EB}=4.0V		100	nA
BV_{CBO}	I_C=100µA	150		V
BV_{CEO}	I_C=30mA	150		V
BV_{EBO}	I_E=100µA	5.0		V
$V_{CE(SAT)}$	I_C=50mA, I_B=5.0mA		1.0	V
$V_{BE(SAT)}$	I_C=50mA, I_B=5.0mA		0.9	V
h_{FE}	V_{CE}=10V, I_C=0.1mA	15		
h_{FE}	V_{CE}=10V, I_C=30mA	30	120	
h_{FE}	V_{CE}=10V, I_C=30mA, T_A=–55°C	12		
f_T	V_{CE}=10V, I_C=30mA, f=20MHz	40		MHz
C_{ob}	V_{CB}=20V, I_E=0, f=140kHz		9.0	pF
C_{ib}	V_{EB}=0.5V, I_C=0, f=140kHz		80	pF

R0 (4-November 2010)

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TO-39 CASE - MECHANICAL OUTLINE



LEAD CODE:
1) Emitter
2) Base
3) Collector

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DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A (DIA)	0.335	0.370	8.51	9.40
B (DIA)	0.315	0.335	8.00	8.51
C	-	0.040	-	1.02
D	0.240	0.260	6.10	6.60
E	0.500	-	12.70	-
F (DIA)	0.016	0.021	0.41	0.53
G (DIA)	0.200		5.08	
H	0.100		2.54	
I	0.028	0.034	0.71	0.86
J	0.029	0.045	0.74	1.14

TO-39 (REV: R1)