2N3637

PNP SILICON TRANSISTOR

TO-39 CASE

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR 2N3637 is a PNP Silicon Transistor, mounted in a hermetically sealed TO-39 package, designed for general purpose amplifier and high voltage switching applications.

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: (T_A=25°C)	**SYMBOL**		**UNITS**
Collector-Base Voltage	V_{CBO}	175	V
Collector-Emitter Voltage	V_{CEO}	175	V
Emitter-Base Voltage	V_{EBO}	5.0	V
Continuous Collector Current	I_C	1.0	A
Power Dissipation	P_D	1.0	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
Thermal Resistance	Θ_{JA}	175	°C/W
Thermal Resistance	Θ_{JC}	35	°C/W

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

SYMBOL	**TEST CONDITIONS**	**MIN**	**MAX**	**UNITS**
I_{CBO}	V_{CB}=100V		100	nA
I_{EBO}	V_{EB}=3.0V		50	nA
BV_{CBO}	I_C=100μA	175		V
BV_{CEO}	I_C=10mA	175		V
BV_{EBO}	I_E=10μA	5.0		V
$V_{CE(SAT)}$	I_C=10mA, I_B=1.0mA		0.3	V
$V_{CE(SAT)}$	I_C=50mA, I_B=5.0mA		0.5	V
$V_{BE(SAT)}$	I_C=10mA, I_B=1.0mA		0.8	V
$V_{BE(SAT)}$	I_C=50mA, I_B=5.0mA	0.65	0.9	V
h_{FE}	V_{CE}=10V, I_C=0.1mA	80		
h_{FE}	V_{CE}=10V, I_C=1.0mA	90		
h_{FE}	V_{CE}=10V, I_C=10mA	100		
h_{FE}	V_{CE}=10V, I_C=50mA	100	300	
h_{FE}	V_{CE}=10V, I_C=150mA	50		
f_T	V_{CE}=30V, I_C=30mA, f=100MHz	200		MHz
C_{ob}	V_{CB}=20V, I_E=0, f=1.0MHz		10	pF
C_{ib}	V_{EB}=1.0V, I_C=0, f=1.0MHz		75	pF
t_{on}	V_{CC}=100V, V_{BE}=4.0V, I_C=50mA, I_{B1}=I_{B2}=5.0mA		400	ns
t_{off}	V_{CC}=100V, V_{BE}=4.0V, I_C=50mA, I_{B1}=I_{B2}=5.0mA		600	ns

R0 (22-November 2010)

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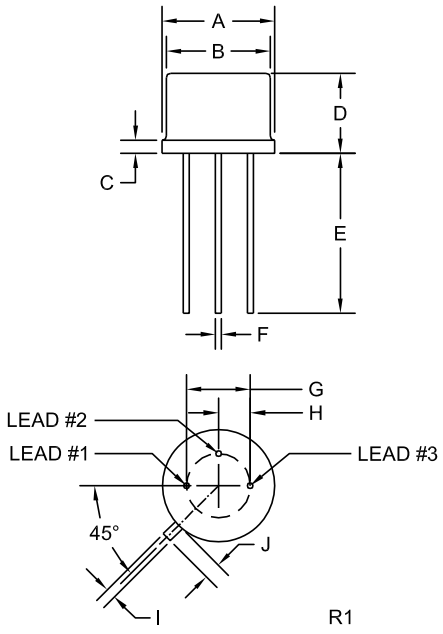
ELECTRICAL CHARACTERISTICS - Continued: (T_A=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
h_{ie}	V_{CE}=10V, I_C=10mA, f=1.0kHz	200	1200	Ω
h_{re}	V_{CE}=10V, I_C=10mA, f=1.0kHz		3.0	$x10^{-4}$
h_{fe}	V_{CE}=10V, I_C=10mA, f=1.0kHz	80	320	
h_{oe}	V_{CE}=10V, I_C=10mA, f=1.0kHz		200	μS
NF	V_{CE}=10V, I_C=0.5mA, f=1.0kHz, R_S=1.0kΩ		3.0	dB

TO-39 CASE - MECHANICAL OUTLINE



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)

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

MARKING: FULL PART NUMBER