2N4036
2N4037

PNP SILICON TRANSISTOR

TO-39 CASE

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR 2N4036, 2N4037 are epitaxial planar PNP Silicon Transistors designed for small signal, medium power, general purpose industrial applications.

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: (T_C=25°C)	**SYMBOL**	**2N4036**	**2N4037**	**UNITS**
Collector-Base Voltage	V_{CBO}	90	60	V
Collector-Emitter Voltage	V_{CEO}	65	40	V
Emitter-Base Voltage	V_{EBO}	7.0	7.0	V
Continuous Collector Current	I_C	1.0		A
Continuous Base Current	I_B	0.5		A
Power Dissipation	P_D	5.0		W
Power Dissipation (T_A=25°C)	P_D	1.0		W
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +200		°C
Thermal Resistance	Θ_{JC}	35		°C/W

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

		2N4036		**2N4037**		
SYMBOL	**TEST CONDITIONS**	**MIN**	**MAX**	**MIN**	**MAX**	**UNITS**
I_{CBO}	V_{CB}=90V	-	1.0	-	-	μA
I_{CBO}	V_{CB}=60V	-	-	-	0.25	μA
I_{CEX}	V_{CE}=85V, V_{EB}=1.5V	-	100	-	-	μA
I_{CEX}	V_{CE}=30V, V_{EB}=1.5V, T_C=150°C	-	-	-	100	mA
I_{EBO}	V_{EB}=7.0V	-	10	-	-	μA
I_{EBO}	V_{EB}=5.0V	-	-	-	1.0	μA
BV_{CEO}	I_C=100mA	65	-	40	-	V
$V_{CE(SAT)}$	I_C=150mA, I_B=15mA	-	0.65	-	1.4	V
$V_{BE(SAT)}$	I_C=150mA, I_B=15mA	-	1.4	-	-	V
$V_{BE(ON)}$	V_{CE}=10V, I_C=150mA	-	-	-	1.5	V
h_{FE}	V_{CE}=10V, I_C=0.1mA	20	-	-	-	
h_{FE}	V_{CE}=10V, I_C=1.0mA	-	-	15	-	
h_{FE}	V_{CE}=10V, I_C=150mA	40	140	50	250	
h_{FE}	V_{CE}=2.0V, I_C=150mA	20	200	-	-	
h_{FE}	V_{CE}=10V, I_C=500mA	20	-	-	-	
f_T	V_{CE}=10V, I_C=50mA, f=20MHz	60	-	60	-	MHz
C_{ob}	V_{CB}=10V, I_E=0, f=1.0MHz	-	30	-	30	pF
t_{on}	V_{CE}=30V, I_C=150mA, I_{B1}=I_{B2}=15mA	-	110	-	-	ns
t_{off}	V_{CE}=30V, I_C=150mA, I_{B1}=I_{B2}=15mA	-	700	-	-	ns

R1 (1-April 2010)

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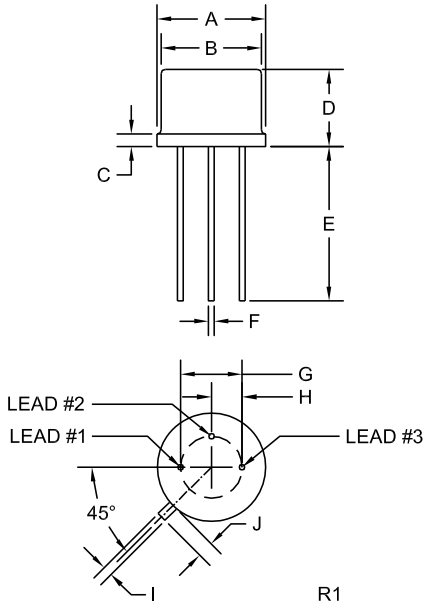
TO-39 CASE - MECHANICAL OUTLINE



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

MARKING: FULL PART NUMBER

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)