2N2906 2N2906A
2N2907 2N2907A

PNP SILICON TRANSISTOR

TO-18 CASE

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR 2N2906, 2N2907 series types are silicon PNP epitaxial planar transistors designed for small signal, general purpose switching applications.

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: (T_A=25°C)	**SYMBOL**	**2N2906 2N2907**	**2N2906A 2N2907A**	**UNITS**
Collector-Base Voltage	V_{CBO}	60	60	V
Collector-Emitter Voltage	V_{CEO}	40	60	V
Emitter-Base Voltage	V_{EBO}	5.0		V
Continuous Collector Current	I_C	600		mA
Power Dissipation	P_D	400		mW
Power Dissipation (T_C=25°C)	P_D	1.8		W
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +200		°C
Thermal Resistance	Θ_{JA}	438		°C/W
Thermal Resistance	Θ_{JC}	97		°C/W

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

		2N2906 2N2907		**2N2906A 2N2907A**		
SYMBOL	**TEST CONDITIONS**	**MIN**	**MAX**	**MIN**	**MAX**	**UNITS**
I_{CBO}	V_{CB}=50V	-	20	-	10	nA
I_{CBO}	V_{CB}=50V, T_A=150°C	-	20	-	10	µA
I_{CEV}	V_{CE}=30V, V_{EB}=0.5V	-	50	-	50	nA
BV_{CBO}	I_C=10µA	60	-	60	-	V
BV_{CEO}	I_C=10mA	40	-	60	-	V
BV_{EBO}	I_E=10µA	5.0	-	5.0	-	V
$V_{CE(SAT)}$	I_C=150mA, I_B=15mA	-	0.4	-	0.4	V
$V_{CE(SAT)}$	I_C=500mA, I_B=50mA	-	1.6	-	1.6	V
$V_{BE(SAT)}$	I_C=150mA, I_B=15mA	-	1.3	-	1.3	V
$V_{BE(SAT)}$	I_C=500mA, I_B=50mA	-	2.6	-	2.6	V
f_T	V_{CE}=20V, I_C=50mA, f=100MHz	200	-	200	-	MHz
C_{ob}	V_{CB}=10V, I_E=0, f=1.0MHz	-	8.0	-	8.0	pF
C_{ib}	V_{EB}=2.0V, I_C=0, f=1.0MHz	-	30	-	30	pF
t_{on}	V_{CC}=30V, I_C=150mA, I_{B1}=15mA	-	45	-	45	ns
t_{off}	V_{CC}=6.0V, I_C=150mA, I_{B1}=I_{B2}=15mA	-	100	-	100	ns

R4 (30-January 2012)

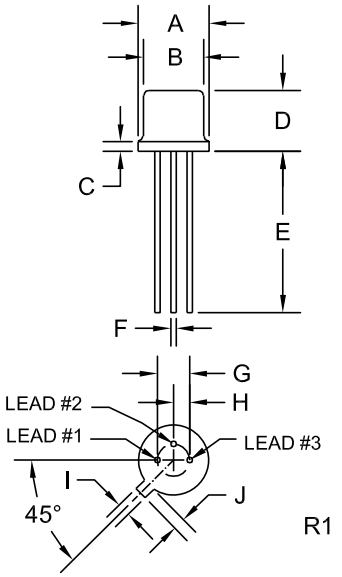
2N2906 2N2906A
2N2907 2N2907A

PNP SILICON TRANSISTOR

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

		2N2906 2N2906A		2N2907 2N2907A	
SYMBOL	**TEST CONDITIONS**	**MIN**	**MAX**	**MIN**	**MAX**
h_{FE}	V_{CE}=10V, I_C=0.1mA (2N2906, 2N2907)	20	-	35	-
h_{FE}	V_{CE}=10V, I_C=0.1mA (2N2906A, 2N2907A)	40	-	75	-
h_{FE}	V_{CE}=10V, I_C=1.0mA (2N2906, 2N2907)	25	-	50	-
h_{FE}	V_{CE}=10V, I_C=1.0mA (2N2906A, 2N2907A)	40	-	100	-
h_{FE}	V_{CE}=10V, I_C=10mA (2N2906, 2N2907)	35	-	75	-
h_{FE}	V_{CE}=10V, I_C=10mA (2N2906A, 2N2907A)	40	-	100	-
h_{FE}	V_{CE}=10V, I_C=150mA	40	120	100	300
h_{FE}	V_{CE}=10V, I_C=500mA (2N2906, 2N2907)	20	-	30	-
h_{FE}	V_{CE}=10V, I_C=500mA (2N2906A, 2N2907A)	40	-	50	-

TO-18 CASE - MECHANICAL OUTLINE



DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A (DIA)	0.209	0.230	5.31	5.84
B (DIA)	0.178	0.195	4.52	4.95
C	-	0.030	-	0.76
D	0.170	0.210	4.32	5.33
E	0.500	-	12.70	-
F (DIA)	0.016	0.019	0.41	0.48
G (DIA)	0.100		2.54	
H	0.050		1.27	
I	0.036	0.046	0.91	1.17
J	0.028	0.048	0.71	1.22

TO-18 (REV: R1)

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

MARKING: FULL PART NUMBER

OUTSTANDING SUPPORT AND SUPERIOR SERVICES

PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

CONTACT US

Corporate Headquarters & Customer Support Team

Central Semiconductor Corp.
145 Adams Avenue
Hauppauge, NY 11788 USA
Main Tel: (631) 435-1110
Main Fax: (631) 435-1824
Support Team Fax: (631) 435-3388
www.centralsemi.com

Worldwide Field Representatives:
www.centralsemi.com/wwreps

Worldwide Distributors:
www.centralsemi.com/wwdistributors