

CentralTM Semiconductor Corp.

145 Adams Avenue, Hauppauge, NY 11788 USA
Tel: (631) 435-1110 • Fax: (631) 435-1824

Manufacturers of World Class Discrete Semiconductors

2N5366
2N5367

PNP SILICON TRANSISTOR

JEDEC TO-92 CASE (ECB)

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N5366, 2N5367 types are PNP Silicon Planar Epitaxial Transistors designed for general purpose switching and amplifier applications.

MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$)

	SYMBOL		UNITS
Collector-Base Voltage	V_{CBO}	40	V
Collector-Emitter Voltage	V_{CEO}	40	V
Emitter-Base Voltage	V_{EBO}	4.0	V
Continuous Collector Current	I_C	300	mA
Collector Current ($t = 10\mu\text{sec}$)	I_C	700	mA
Power Dissipation	P_D	625	mW
Operating and Storage			
Junction Temperature	T_J, T_{stg}	-65 to +150	$^\circ\text{C}$
Thermal Resistance	θ_{JA}	0.2	$^\circ\text{C}/\text{mW}$

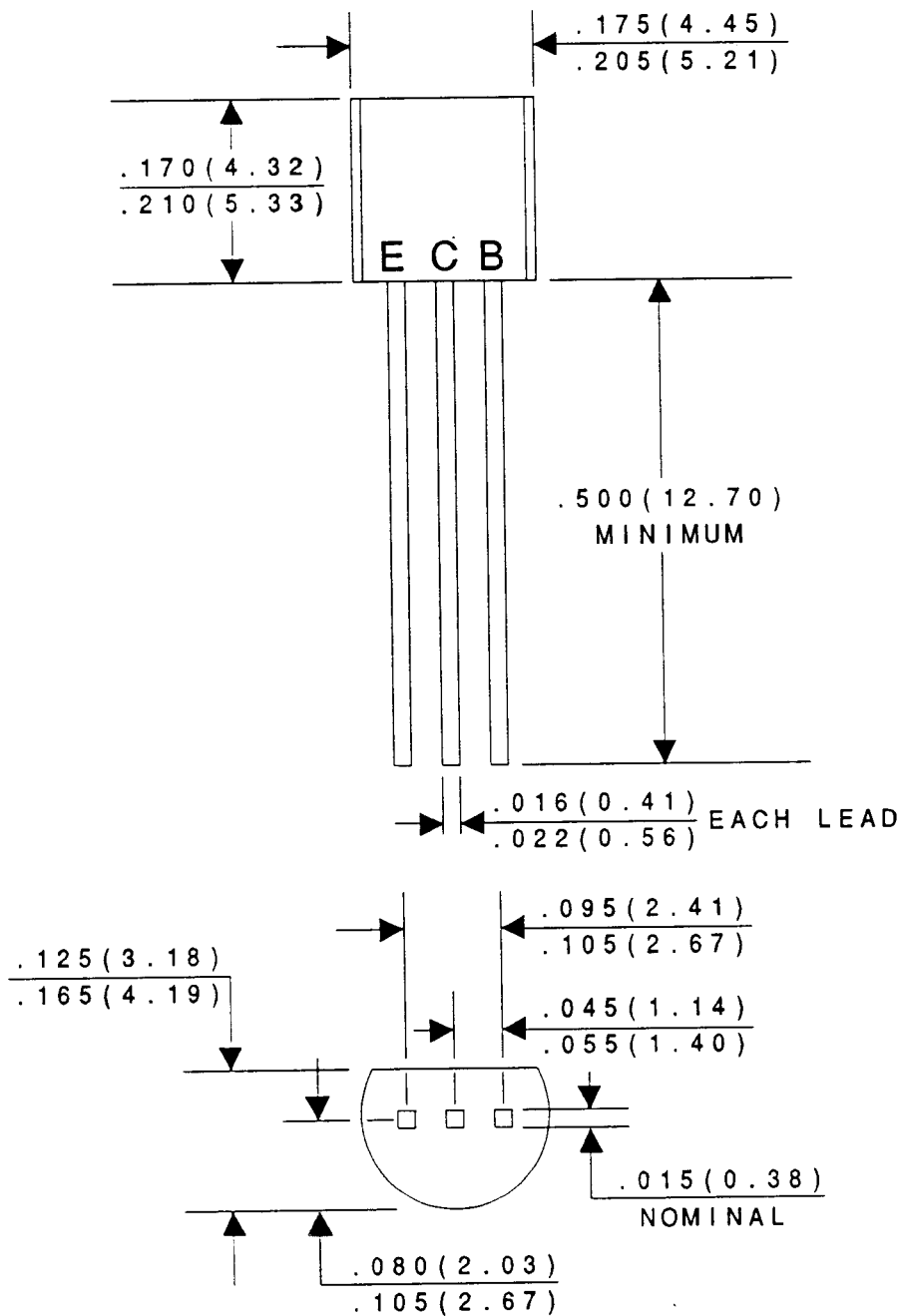
ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	2N5366		2N5367		UNITS
		MIN	MAX	MIN	MAX	
I_{CBO}	$V_{CB} = 40\text{V}$		100		100	nA
I_{CBO}	$V_{CB} = 40\text{V}, T_A = 100^\circ\text{C}$		10		10	μA
I_{CES}	$V_{CB} = 40\text{V}$		100		100	nA
I_{EBO}	$V_{EB} = 4.0\text{V}$		10		10	μA
BV_{CEO}	$I_C = 10\text{mA}$	40		40		V
$V_{CE(SAT)}$	$I_C = 50\text{mA}, I_B = 2.5\text{mA}$		0.25		0.25	V
$V_{CE(SAT)}$	$I_C = 300\text{mA}, I_B = 30\text{mA}$		1.0		1.0	V
$V_{BE(SAT)}$	$I_C = 50\text{mA}, I_B = 2.5\text{mA}$		1.1		1.1	V
$V_{BE(SAT)}$	$I_C = 300\text{mA}, I_B = 30\text{mA}$		2.0		2.0	V
$V_{BE(ON)}$	$V_{CE} = 10\text{V}, I_C = 2.0\text{mA}$	0.5	0.8	0.5	0.8	V
h_{FE}	$V_{CE} = 10\text{V}, I_C = 2.0\text{mA}$	80		200		
h_{FE}	$V_{CE} = 1.0\text{V}, I_C = 50\text{mA}$	100	300	250	500	
h_{FE}	$V_{CE} = 5.0\text{V}, I_C = 300\text{mA}$	40		75		
C_{ob}	$V_{CB} = 10\text{V}, I_E = 0, f = 1.0\text{MHz}$		8.0		8.0	pF
C_{ib}	$V_{EB} = 0.5\text{V}, I_C = 0, f = 1.0\text{MHz}$		35		35	pF
h_{fe}	$V_{CE} = 10\text{V}, I_C = 2.0\text{mA}, f = 1.0\text{kHz}$	80	450	200	750	
f_T	$V_{CE} = 10\text{V}, I_C = 2.0\text{mA}$		250 TYP		250 TYP	MHz

(OVER)

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JEDEC TO-92 CASE - MECHANICAL OUTLINE



All Dimensions in Inches (mm).

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

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

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.centrasemi.com

Worldwide Field Representatives:
www.centrasemi.com/wwreps

Worldwide Distributors:
www.centrasemi.com/wwdistributors

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