

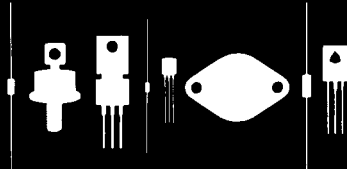
Central  
Semiconductor Corp.

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Central<sup>TM</sup>  
Semiconductor Corp.

145 Adams Avenue  
Hauppauge, New York 11788



MJE371 PNP  
MJE521 NPN

SILICON COMPLEMENTARY  
POWER TRANSISTORS

JEDEC TO-126 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR MJE371, MJE521 types are Complementary Silicon Power Transistors designed for use in general purpose amplifier and switching applications.

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

	<u>SYMBOL</u>		<u>UNIT</u>
Collector-Base Voltage	$V_{CB0}$	40	V
Collector-Emitter Voltage	$V_{CE0}$	40	V
Emitter-Base Voltage	$V_{EB0}$	4.0	V
Collector Current	$I_C$	4.0	A
Collector Current (PEAK)	$I_{CM}$	8.0	A
Power Dissipation	$P_D$	40	W
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 TO +150	$^{\circ}C$
Thermal Resistance	$\theta_{JC}$	3.1	$^{\circ}C/W$

ELECTRICAL CHARACTERISTICS ( $T_C=25^{\circ}C$ )

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>MIN</u>	<u>MAX</u>	<u>UNIT</u>
$I_{CB0}$	$V_{CB}=40V$		100	$\mu A$
$I_{EB0}$	$V_{EB}=4.0V$		100	$\mu A$
$BV_{CE0}$	$I_C=100mA$	40		V
$h_{FE}$	$V_{CE}=1.0V, I_C=1.0A$	40		



To-126

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### 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

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### DESIGNER SUPPORT/SERVICES

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

- Free quick ship samples (2<sup>nd</sup> 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

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### 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).

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### CONTACT US

#### Corporate Headquarters & Customer Support Team

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