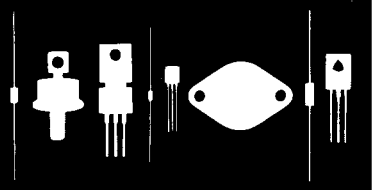
Central
Semiconductor Corp.
145 Adams Avenue
Hauppauge, New York 11788



2N6121 2N6122 2N6123 NPN
2N6124 2N6125 2N6126 PNP
COMPLEMENTARY SILICON POWER TRANSISTORS

JEDEC TO-220 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N6121 series types are Complementary Silicon Power Transistors designed for power amplifier and switching applications.

MAXIMUM RATINGS (T_C=25°C)

	SYMBOL	2N6121 2N6124	2N6122 2N6125	2N6123 2N6126	UNIT
Collector-Base Current	V_{CBO}	45	60	80	V
Collector-Emitter Voltage	V_{CEO}	45	60	80	V
Emitter-Base Voltage	V_{EBO}	5.0	5.0	5.0	V
Collector Current	I_C	4.0	4.0	4.0	A
Base Current	I_B	1.0	1.0	1.0	A
Power Dissipation	P_D	40	40	40	W
Operating and Storage Junction Temperature	T_J, T_{stg}		-65 TO +150		°C
Thermal Resistance	ΘJC	3.1	3.1	3.1	°C/W

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

		2N6121 2N6124		2N6122 2N6125		2N6123 2N6126		
SYMBOL	TEST CONDITIONS	MIN	MAX	MIN	MAX	MIN	MAX	UNIT
BV_{CEO}	I_C=0.1A	45		60		80		V
I_{CEV}	V_{CE}=Rated V_{CEO}, V_{BE}=1.5V		0.1		0.1		0.1	mA
I_{CEV}	V_{CE}=Rated V_{CEO}, V_{BE}=1.5V (T_C=125°C)		2.0		2.0		2.0	mA
I_{CEO}	V_{CE}=Rated V_{CEO}		1.0		1.0		1.0	mA
I_{CBO}	V_{CE}=Rated V_{CBO}		0.1		0.1		0.1	mA
I_{EBO}	V_{BE}=5.0V		1.0		1.0		1.0	mA
$V_{CE(SAT)}$	I_C=1.5A, I_B=0.15A		0.6		0.6		0.6	V
$V_{CE(SAT)}$	I_C=4.0A, I_B=1.0A		1.4		1.4		1.4	V
$V_{BE(ON)}$	V_{CE}=2.0V, I_C=1.5A		1.2		1.2		1.2	V
h_{FE}	V_{CE}=2.0V, I_C=1.5A	25	100	25	100	20	80	
h_{FE}	V_{CE}=2.0V, I_C=4.0A	10		10		7.0		
h_{fe}	V_{CE}=2.0V, I_C=0.1A, f=1.0kHz	25		25		25		
f_T	V_{CE}=4.0V, I_C=1.0A, f=1.0MHz	2.5		2.5		2.5		MHz

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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

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