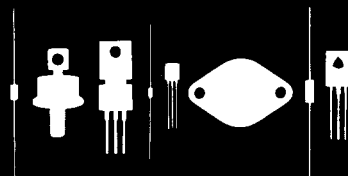


Central
Semiconductor Corp.
Central
Semiconductor Corp.
Central
Semiconductor Corp.
Central™
Semiconductor Corp.

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

	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			$^\circ\text{C}$
Thermal Resistance	θ_{JC}	3.1	3.1	3.1	$^\circ\text{C/W}$

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

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

Central™
Semiconductor Corp.

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

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

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: www.centrasemi.com/terms