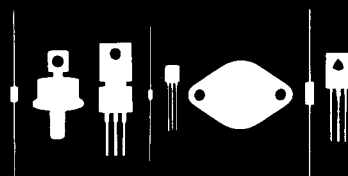


145 Adams Avenue
Hauppauge, New York 11788



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	2N6122	2N6123	
		2N6124	2N6125	2N6126	UNIT
Collector-Base Current	V_{CB0}	45	60	80	V
Collector-Emitter Voltage	V_{CE0}	45	60	80	V
Emitter-Base Voltage	V_{EB0}	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	θ_{JC}	3.1	3.1	3.1	°C/W

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

SYMBOL	TEST CONDITIONS	2N6121		2N6122		2N6123		UNIT
		MIN	MAX	MIN	MAX	MIN	MAX	
V_{CE0}	$I_C=0.1A$	45		60		80		V
I_{CEV}	$V_{CE}=\text{Rated } V_{CE0}, V_{BE}=1.5V$		0.1		0.1		0.1	mA
I_{CEV}	$V_{CE}=\text{Rated } V_{CE0}, V_{BE}=1.5V (T_C=125^\circ C)$		2.0		2.0		2.0	mA
I_{CEO}	$V_{CE}=\text{Rated } V_{CE0}$		1.0		1.0		1.0	mA
I_{CBO}	$V_{CE}=\text{Rated } V_{CBO}$		0.1		0.1		0.1	mA
I_{EBO}	$V_{BE}=5.0V$		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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- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
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- Application notes
- Application and design sample kits
- Custom product and package development

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