

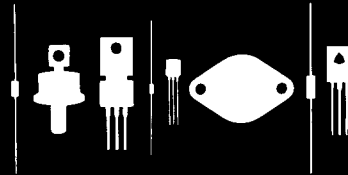
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**Central**<sup>TM</sup>  
**Semiconductor Corp.**

145 Adams Avenue  
Hauppauge, New York 11788



2N5954	2N5955	2N5956	NPN
2N6372	2N6373	2N6374	PNP

COMPLEMENTARY SILICON POWER  
TRANSISTORS

JEDEC TO-66 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N5954, 2N6372 series types are complementary silicon power transistors manufactured by the epitaxial base process, mounted in a hermetically sealed metal case designed for general purpose amplifier and switching applications.

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

	SYMBOL	2N5954 2N6372	2N5955 2N6373	2N5956 2N6374	UNIT
Collector-Base Voltage	V <sub>CB0</sub>	90	70	50	V
Collector-Emitter Voltage ( $V_{BE}=1.5V$ )	V <sub>CEV</sub>	90	70	50	V
Collector-Emitter Voltage ( $R_{BE}=100\Omega$ )	V <sub>CER</sub>	85	65	45	V
Collector-Emitter Voltage	V <sub>CEO</sub>	80	60	40	V
Emitter-Base Voltage	V <sub>EBO</sub>	5.0	5.0	5.0	V
Collector Current	I <sub>C</sub>	6.0	6.0	6.0	A
Base Current	I <sub>B</sub>	2.0	2.0	2.0	A
Power Dissipation	P <sub>D</sub>	40	40	40	W
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>STG</sub>	-65 TO +200			$^\circ\text{C}$
Thermal Resistance	$\theta_{JC}$	4.3			$^\circ\text{C}/\text{W}$

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

SYMBOL	TEST CONDITIONS	2N5954 2N6372		2N5955 2N6373		2N5956 2N6374		UNIT
		MIN	MAX	MIN	MAX	MIN	MAX	
I <sub>CEV</sub>	V <sub>CE</sub> =85V, V <sub>BE</sub> =1.5V, R <sub>BE</sub> =100 $\Omega$		100		-		-	$\mu\text{A}$
I <sub>CEV</sub>	V <sub>CE</sub> =65V, V <sub>BE</sub> =1.5V, R <sub>BE</sub> =100 $\Omega$		-		100		-	$\mu\text{A}$
I <sub>CEV</sub>	V <sub>CE</sub> =45V, V <sub>BE</sub> =1.5V, R <sub>BE</sub> =100 $\Omega$		-		-		100	$\mu\text{A}$
I <sub>CEV</sub>	V <sub>CE</sub> =85V, V <sub>BE</sub> =1.5V, R <sub>BE</sub> =100 $\Omega$ , T <sub>C</sub> =150 $^\circ\text{C}$		2.0		-		-	mA
I <sub>CEV</sub>	V <sub>CE</sub> =65V, V <sub>BE</sub> =1.5V, R <sub>BE</sub> =100 $\Omega$ , T <sub>C</sub> =150 $^\circ\text{C}$		-		2.0		-	mA
I <sub>CEV</sub>	V <sub>CE</sub> =45V, V <sub>BE</sub> =1.5V, R <sub>BE</sub> =100 $\Omega$ , T <sub>C</sub> =150 $^\circ\text{C}$		-		-		2.0	mA
I <sub>CER</sub>	V <sub>CE</sub> =75V		100		-		-	$\mu\text{A}$
I <sub>CER</sub>	V <sub>CE</sub> =55V		-		100		-	$\mu\text{A}$
I <sub>CER</sub>	V <sub>CE</sub> =35V		-		-		100	$\mu\text{A}$
I <sub>CEO</sub>	V <sub>CE</sub> =65V		1.0		-		-	mA
I <sub>CEO</sub>	V <sub>CE</sub> =45V		-		1.0		-	mA
I <sub>CEO</sub>	V <sub>CE</sub> =25V		-		-		1.0	mA
I <sub>EBO</sub>	V <sub>BE</sub> =5.0V		0.1		0.1		0.1	mA
BV <sub>CEV</sub>	V <sub>BE</sub> =1.5V, I <sub>C</sub> =0.1A, R <sub>BE</sub> =100 $\Omega$	90		70		50		V
BV <sub>CER</sub>	I <sub>C</sub> =0.1A, R <sub>BE</sub> =100 $\Omega$	85		65		45		V
BV <sub>CEO</sub>	I <sub>C</sub> =0.1A	80		60		40		V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =2.0A, I <sub>B</sub> =0.2A		1.0		-		-	V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =2.5A, I <sub>B</sub> =0.25A		-		1.0		-	V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =3.0A, I <sub>B</sub> =0.3A		-		-		1.0	V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =6.0A, I <sub>B</sub> =1.2A (NPN types)		2.0		2.0		2.0	V
V <sub>BE(ON)</sub>	V <sub>CE</sub> =4.0V, I <sub>C</sub> =2.0A		2.0		-		-	V
V <sub>BE(ON)</sub>	V <sub>CE</sub> =4.0V, I <sub>C</sub> =2.5A		-		2.0		-	V
V <sub>BE(ON)</sub>	V <sub>CE</sub> =4.0V, I <sub>C</sub> =3.0A		-		-		2.0	V
V <sub>BE(ON)</sub>	V <sub>CE</sub> =4.0V, I <sub>C</sub> =6.0A (PNP types)		3.0		3.0		3.0	V

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

SYMBOL	TEST CONDITIONS	2N5954 2N6372		2N5955 2N6373		2N5956 2N6374		UNIT
		MIN	MAX	MIN	MAX	MIN	MAX	
hFE	$V_{CE}=4.0V, I_C=2.0A$	20	100	-	-	-	-	
hFE	$V_{CE}=4.0V, I_C=2.5A$	-	-	20	100	-	-	
hFE	$V_{CE}=4.0V, I_C=3.0A$	-	-	-	-	20	100	
hFE	$V_{CE}=4.0V, I_C=6.0A$	5.0		5.0		5.0		
hfe	$V_{CE}=4.0V, I_C=0.5A, f=1.0kHz$	25		25		25		
fT	$V_{CE}=4.0V, I_C=1.0A, f=1.0MHz$ (PNP types)	4.0		4.0		4.0		MHz
fT	$V_{CE}=4.0V, I_C=1.0A, f=1.0MHz$ (NPN types)	5.0		5.0		5.0		MHz

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