

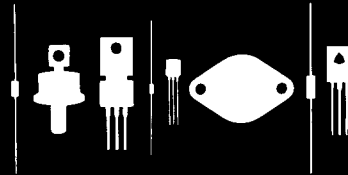
Central
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145 Adams Avenue
Hauppauge, New York 11788



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_{CB0}	90	70	50	V
Collector-Emitter Voltage ($V_{BE}=1.5V$)	V_{CEV}	90	70	50	V
Collector-Emitter Voltage ($R_{BE}=100\Omega$)	V_{CER}	85	65	45	V
Collector-Emitter Voltage	V_{CEO}	80	60	40	V
Emitter-Base Voltage	V_{EBO}	5.0	5.0	5.0	V
Collector Current	I_C	6.0	6.0	6.0	A
Base Current	I_B	2.0	2.0	2.0	A
Power Dissipation	P_D	40	40	40	W
Operating and Storage Junction Temperature	T_J, T_{STG}	-65 TO +200			$^\circ\text{C}$
Thermal Resistance	θ_{JC}	4.3			$^\circ\text{C/W}$

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_{CEV}	$V_{CE}=85V, V_{BE}=1.5V, R_{BE}=100\Omega$		100		-		-	μA
I_{CEV}	$V_{CE}=65V, V_{BE}=1.5V, R_{BE}=100\Omega$		-		100		-	μA
I_{CEV}	$V_{CE}=45V, V_{BE}=1.5V, R_{BE}=100\Omega$		-		-		100	μA
I_{CEV}	$V_{CE}=85V, V_{BE}=1.5V, R_{BE}=100\Omega, T_C=150^\circ\text{C}$		2.0		-		-	mA
I_{CEV}	$V_{CE}=65V, V_{BE}=1.5V, R_{BE}=100\Omega, T_C=150^\circ\text{C}$		-		2.0		-	mA
I_{CEV}	$V_{CE}=45V, V_{BE}=1.5V, R_{BE}=100\Omega, T_C=150^\circ\text{C}$		-		-		2.0	mA
I_{CER}	$V_{CE}=75V$		100		-		-	μA
I_{CER}	$V_{CE}=55V$		-		100		-	μA
I_{CER}	$V_{CE}=35V$		-		-		100	μA
I_{CEO}	$V_{CE}=65V$		1.0		-		-	mA
I_{CEO}	$V_{CE}=45V$		-		1.0		-	mA
I_{CEO}	$V_{CE}=25V$		-		-		1.0	mA
I_{EBO}	$V_{BE}=5.0V$		0.1		0.1		0.1	mA
BV_{CEV}	$V_{BE}=1.5V, I_C=0.1A, R_{BE}=100\Omega$	90		70		50		V
BV_{CER}	$I_C=0.1A, R_{BE}=100\Omega$	85		65		45		V
BV_{CEO}	$I_C=0.1A$	80		60		40		V
$V_{CE(SAT)}$	$I_C=2.0A, I_B=0.2A$		1.0		-		-	V
$V_{CE(SAT)}$	$I_C=2.5A, I_B=0.25A$		-		1.0		-	V
$V_{CE(SAT)}$	$I_C=3.0A, I_B=0.3A$		-		-		1.0	V
$V_{CE(SAT)}$	$I_C=6.0A, I_B=1.2A$ (NPN types)		2.0		2.0		2.0	V
$V_{BE(ON)}$	$V_{CE}=4.0V, I_C=2.0A$		2.0		-		-	V
$V_{BE(ON)}$	$V_{CE}=4.0V, I_C=2.5A$		-		2.0		-	V
$V_{BE(ON)}$	$V_{CE}=4.0V, I_C=3.0A$		-		-		2.0	V
$V_{BE(ON)}$	$V_{CE}=4.0V, I_C=6.0A$ (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	$V_{CE}=4.0\text{V}$, $I_C=2.0\text{A}$	20	100	-	-	-	-	
hFE	$V_{CE}=4.0\text{V}$, $I_C=2.5\text{A}$	-	-	20	100	-	-	
hFE	$V_{CE}=4.0\text{V}$, $I_C=3.0\text{A}$	-	-	-	-	20	100	
hFE	$V_{CE}=4.0\text{V}$, $I_C=6.0\text{A}$	5.0		5.0		5.0		
hfe	$V_{CE}=4.0\text{V}$, $I_C=0.5\text{A}$, $f=1.0\text{kHz}$	25		25		25		
f T	$V_{CE}=4.0\text{V}$, $I_C=1.0\text{A}$, $f=1.0\text{MHz}$ (PNP types)	4.0		4.0		4.0		MHz
f T	$V_{CE}=4.0\text{V}$, $I_C=1.0\text{A}$, $f=1.0\text{MHz}$ (NPN types)	5.0		5.0		5.0		MHz

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