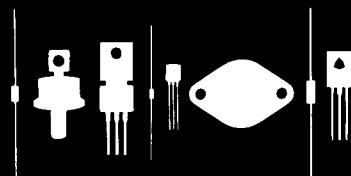


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145 Adams Avenue
Hauppauge, New York 11788



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 ($V_{BE}=1.5\text{V}$)	V_{CEV}	90	70	50	V
Collector-Emitter Voltage ($R_{BE}=100\Omega$)	V_{CER}	85	65	45	V
Collector-Emitter Voltage	V_{CE0}	80	60	40	V
Emitter-Base Voltage	V_{EB0}	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}	$V_{CE}=85\text{V}, V_{BE}=1.5\text{V}, R_{BE}=100\Omega$		100		-		-	μA
I_{CEV}	$V_{CE}=65\text{V}, V_{BE}=1.5\text{V}, R_{BE}=100\Omega$		-		100		-	μA
I_{CEV}	$V_{CE}=45\text{V}, V_{BE}=1.5\text{V}, R_{BE}=100\Omega$		-		-		100	μA
I_{CEV}	$V_{CE}=85\text{V}, V_{BE}=1.5\text{V}, R_{BE}=100\Omega, T_C=150^{\circ}\text{C}$		2.0		-		-	mA
I_{CEV}	$V_{CE}=65\text{V}, V_{BE}=1.5\text{V}, R_{BE}=100\Omega, T_C=150^{\circ}\text{C}$		-		2.0		-	mA
I_{CEV}	$V_{CE}=45\text{V}, V_{BE}=1.5\text{V}, R_{BE}=100\Omega, T_C=150^{\circ}\text{C}$		-		-		2.0	mA
I_{CER}	$V_{CE}=75\text{V}$		100		-		-	μA
I_{CER}	$V_{CE}=55\text{V}$		-		100		-	μA
I_{CER}	$V_{CE}=35\text{V}$		-		-		100	μA
I_{CE0}	$V_{CE}=65\text{V}$		1.0		-		-	mA
I_{CE0}	$V_{CE}=45\text{V}$		-		1.0		-	mA
I_{CE0}	$V_{CE}=25\text{V}$		-		-		1.0	mA
I_{EB0}	$V_{BE}=5.0\text{V}$		0.1		0.1		0.1	mA
BV_{CEV}	$V_{BE}=1.5\text{V}, I_C=0.1\text{A}, R_{BE}=100\Omega$	90		70		50		V
BV_{CER}	$I_C=0.1\text{A}, R_{BE}=100\Omega$	85		65		45		V
BV_{CE0}	$I_C=0.1\text{A}$	80		60		40		V
$V_{CE}(\text{SAT})$	$I_C=2.0\text{A}, I_B=0.2\text{A}$		1.0		-		-	V
$V_{CE}(\text{SAT})$	$I_C=2.5\text{A}, I_B=0.25\text{A}$		-		1.0		-	V
$V_{CE}(\text{SAT})$	$I_C=3.0\text{A}, I_B=0.3\text{A}$		-		-		1.0	V
$V_{CE}(\text{SAT})$	$I_C=6.0\text{A}, I_B=1.2\text{A}$ (NPN types)		2.0		2.0		2.0	V
$V_{BE}(\text{ON})$	$V_{CE}=4.0\text{V}, I_C=2.0\text{A}$		2.0		-		-	V
$V_{BE}(\text{ON})$	$V_{CE}=4.0\text{V}, I_C=2.5\text{A}$		-		2.0		-	V
$V_{BE}(\text{ON})$	$V_{CE}=4.0\text{V}, I_C=3.0\text{A}$		-		-		2.0	V
$V_{BE}(\text{ON})$	$V_{CE}=4.0\text{V}, I_C=6.0\text{A}$ (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	
h_{FE}	$V_{CE}=4.0\text{V}$, $I_C=2.0\text{A}$	20	100	-	-	-	-	
h_{FE}	$V_{CE}=4.0\text{V}$, $I_C=2.5\text{A}$	-	-	20	100	-	-	
h_{FE}	$V_{CE}=4.0\text{V}$, $I_C=3.0\text{A}$	-	-	-	-	20	100	
h_{FE}	$V_{CE}=4.0\text{V}$, $I_C=6.0\text{A}$	5.0		5.0		5.0		
h_{fe}	$V_{CE}=4.0\text{V}$, $I_C=0.5\text{A}$, $f=1.0\text{kHz}$	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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