

New Jersey Semi-Conductor Products, Inc.

20 STERN AVE.
SPRINGFIELD, NEW JERSEY 07081
U.S.A.

TELEPHONE: (973) 376-2922
(212) 227-6005
FAX: (973) 376-8960

NPN	PNP
2N6551	2N6554
2N6552	2N6555
2N6553	2N6556

COMPLEMENTARY SILICON TRANSISTOR

TO-202

MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$)

	SYMBOL	2N6551 2N6554	2N6552 2N6555	2N6553 2N6556	UNITS
Collector-Base Voltage	V_{CBO}	60	80	100	V
Collector-Emitter Voltage	V_{CEO}	60	80	100	V
Emitter-Base Voltage	V_{EBO}		5.0		V
Collector Current	I_C		1.0		A
Peak Collector Current	I_{CM}		2.0		A
Base Current	I_B		100		mA
Power Dissipation	P_D		2.0		W
Power Dissipation ($T_C = 25^\circ\text{C}$)	P_D		10		W
Operating and Storage					
Junction Temperature	T_J, T_{stg}		-65 to +150		$^\circ\text{C}$
Thermal Resistance	θ_{JA}		62.5		$^\circ\text{C/W}$
Thermal Resistance	θ_{JC}		12.5		$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	2N6551 2N6554		2N6552 2N6555		2N6553 2N6556		UNITS
		MIN	MAX	MIN	MAX	MIN	MAX	
I_{CBO}	$V_{CB} = 40\text{V}$		100		-		-	nA
I_{CBO}	$V_{CB} = 60\text{V}$		-		100		-	nA
I_{CBO}	$V_{CB} = 80\text{V}$		-		-		100	nA
I_{EBO}	$V_{BE} = 4.0\text{V}$		100		100		100	nA
V_{CEO}	$I_C = 1.0\text{mA}$	60		80		100		V
V_{CBO}	$I_C = 100\mu\text{A}$	60		80		100		V
V_{EBO}	$I_E = 100\mu\text{A}$	5.0		5.0		5.0		V
$V_{CE(SAT)}$	$I_C = 250\text{mA}, I_B = 10\text{mA}$		0.5		0.5		0.5	V
$V_{CE(SAT)}$	$I_C = 1.0\text{A}, I_B = 100\text{mA}$		1.0		1.0		1.0	V
$V_{BE(ON)}$	$V_{CE} = 5.0\text{V}, I_C = 250\text{mA}$		1.2		1.2		1.2	V
h_{FE}	$V_{CE} = 1.0\text{V}, I_C = 10\text{mA}$	60		60		60		
h_{FE}	$V_{CE} = 1.0\text{V}, I_C = 50\text{mA}$	80	300	80	300	80	300	
h_{FE}	$V_{CE} = 1.0\text{V}, I_C = 250\text{mA}$	60		60		60		
h_{FE}	$V_{CE} = 1.0\text{V}, I_C = 500\text{mA}$	25		25		25		
f_T	$V_{CE} = 5.0\text{V}, I_C = 100\text{mA}, f = 20\text{MHz}$	75	375	75	375	75	375	MHz
C_{ob}	$V_{CB} = 20\text{V}, I_E = 0, f = 1.0\text{MHz}$		18		18		18	pF



NJ Semi-Conductors reserves the right to change test conditions, parameters limits and package dimensions without notice information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

Quality Semi-Conductors

JEDEC TO-202 CASE - MECHANICAL OUTLINE

