

New Jersey Semi-Conductor Products, Inc.

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2N6430 2N6431 NPN
2N6432 2N6433 PNP

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COMPLEMENTARY SILICON TRANSISTOR

TO-18

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

	SYMBOL	2N6430 2N6432	2N6431 2N6433	UNITS
Collector-Base Voltage	V_{CBO}	200	300	V
Collector-Emitter Voltage	V_{CEO}	200	300	V
Emitter-Base Voltage (NPN Types)	V_{EBO}	6.0	6.0	V
Emitter-Base Voltage (PNP Types)	V_{EBO}	5.0	5.0	V
Collector Current	I_C	100		mA
Power Dissipation	P_D	500		mW
Power Dissipation ($T_C = 25^\circ\text{C}$)	P_D	1.8		W
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +200		$^\circ\text{C}$
Thermal Resistance	θ_{JA}	0.35		$^\circ\text{C}/\text{mW}$
Thermal Resistance	θ_{JC}	97.2		$^\circ\text{C}/\text{W}$

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

SYMBOL	TEST CONDITIONS	2N6430 2N6431		2N6432 2N6433		UNITS
		MIN	MAX	MIN	MAX	
I_{CBO}	$V_{CB} = 160\text{V}$ (2N6430, 2N6432)		0.1		0.25	μA
I_{CBO}	$V_{CB} = 200\text{V}$ (2N6431, 2N6433)		0.1		0.25	μA
I_{EBO}	$V_{EB} = 4.0\text{V}$		0.1		-	μA
I_{EBO}	$V_{BE} = 3.0\text{V}$		-		0.1	μA
BV_{CBO}	$I_C = 0.1\text{mA}$ (2N6430, 2N6432)	200		200		V
BV_{CBO}	$I_C = 0.1\text{mA}$ (2N6431, 2N6433)	300		300		V
BV_{CEO}	$I_C = 1.0\text{mA}$ (2N6430, 2N6432)	200		200		V
BV_{CEO}	$I_C = 1.0\text{mA}$ (2N6431, 2N6433)	300		300		V
BV_{EBO}	$I_E = 0.1\text{mA}$	6.0		5.0		V
$V_{CE(SAT)}$	$I_C = 20\text{mA}$, $I_B = 2.0\text{mA}$		0.5		0.5	V
$V_{BE(SAT)}$	$I_C = 20\text{mA}$, $I_B = 2.0\text{mA}$		0.9		0.9	V
h_{FE}	$V_{CE} = 10\text{V}$, $I_C = 1.0\text{mA}$	25		25		
h_{FE}	$V_{CE} = 10\text{V}$, $I_C = 10\text{mA}$	40		40		
h_{FE}	$V_{CE} = 10\text{V}$, $I_C = 30\text{mA}$	50	200	30	150	



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