

# New Jersey Semi-Conductor Products, Inc.

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2N6716 2N6717 2N6718 NPN  
 2N6728 2N6729 2N6730 PNP

## COMPLEMENTARY SILICON POWER TRANSISTORS

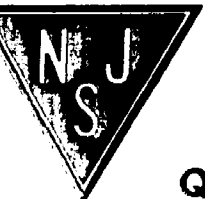
T0-237

### MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise noted)

	SYMBOL	2N6716 2N6728	2N6717 2N6729	2N6718 2N6730	UNIT
Collector-Base voltage	V <sub>CB0</sub>	60	80	100	V
Collector-Emitter Voltage	V <sub>CE0</sub>	60	80	100	V
Emitter-Base Voltage	V <sub>EB0</sub>		5.0		V
Collector Current	I <sub>C</sub>		2.0		A
Base Current	I <sub>B</sub>		0.5		A
Power Dissipation	P <sub>D</sub>		1.0		W
Power Dissipation (T <sub>C</sub> =25°C)	P <sub>D</sub>		2.0		W
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 TO +150			°C
Thermal Resistance	θ <sub>JA</sub>		125		°C/W
Thermal Resistance	θ <sub>JC</sub>		62.5		°C/W

### ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
I <sub>CB0</sub>	V <sub>CB</sub> =Rated V <sub>CB0</sub>		0.1	μA
I <sub>EB0</sub>	V <sub>EB</sub> =Rated V <sub>EB0</sub>		10	μA
BV <sub>CB0</sub>	I <sub>C</sub> =0.1mA (2N6716, 2N6728)	60		V
BV <sub>CB0</sub>	I <sub>C</sub> =0.1mA (2N6717, 2N6729)	80		V
BV <sub>CB0</sub>	I <sub>C</sub> =0.1mA (2N6718, 2N6730)	100		V
BV <sub>CE0</sub>	I <sub>C</sub> =1.0mA (2N6716, 2N6728)	60		V
BV <sub>CE0</sub>	I <sub>C</sub> =1.0mA (2N6717, 2N6729)	80		V
BV <sub>CE0</sub>	I <sub>C</sub> =1.0mA (2N6718, 2N6730)	100		V
BV <sub>EB0</sub>	I <sub>E</sub> =0.1mA	5.0		V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =250mA, I <sub>B</sub> =10mA		0.5	V
V <sub>BE(ON)</sub>	V <sub>CE</sub> =1.0V, I <sub>C</sub> =250mA		1.2	V
h <sub>FE</sub>	V <sub>CE</sub> =1.0V, I <sub>C</sub> =50mA	80		
h <sub>FE</sub>	V <sub>CE</sub> =1.0V, I <sub>C</sub> =250mA	50	250	
f <sub>T</sub>	V <sub>CE</sub> =5.0V, I <sub>C</sub> =200mA, f=20MHz	50	500	MHz
C <sub>ob</sub>	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1.0MHz		30	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**