

# New Jersey Semi-Conductor Products, Inc.

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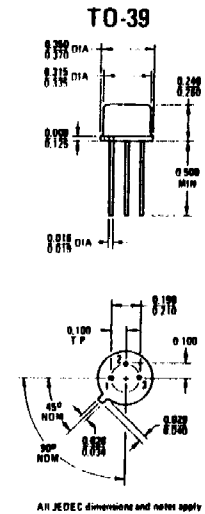
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## 2N6376 (SILICON)

NPN SILICON HIGH-FREQUENCY TRANSISTOR

### MAXIMUM RATINGS ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

Rating	Symbol	Value	Unit
Collector-Emitter	$V_{CEO}$	40	Vdc
Collector-Base Voltage	$V_{CB}$	75	Vdc
Emitter-Base Voltage	$V_{EB}$	5	Vdc
Collector Current	$I_C$	0.4	Amp
Total Device Dissipation @ $T_C = 25^\circ\text{C}$ Derate above $25^\circ\text{C}$	$P_D$	5.0 28.6	Watts $\text{mW}/^\circ\text{C}$
Operating and Storage Junction Temperature Range	$T_J, T_{stg}$	-65 to +200	$^\circ\text{C}$



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

Characteristic	Symbol	Min	Typ	Max	Unit
<b>OFF CHARACTERISTICS</b>					
Collector-Emitter Sustaining Voltage ( $I_C = 5.0 \text{ mAdc}, I_B = 0$ )	$BV_{CE(sus)}$	40			Vdc
Collector-Base Breakdown Voltage ( $I_E = 0, I_C = 0.1 \text{ mAdc}$ )	$BV_{CBO}$	75			Vdc
Emitter-Base Breakdown Voltage ( $I_E = 0.1 \text{ mAdc}, I_C = 0$ )	$BV_{EBO}$	5			Vdc
Collector Cutoff Current ( $V_{CE} = 28 \text{ Vdc}, I_B = 0$ )	$I_{EBO}$			100	$\mu\text{Adc}$
Collector Cutoff Current ( $V_{CE} = 55 \text{ Vdc}, V_{BE} = 1.5 \text{ Vdc}$ )	$I_{CBO}$			200	nAdc
<b>ON CHARACTERISTICS</b>					
DC Current Gain ( $I_C = 500 \text{ mAdc}, V_{CE} = 1.0 \text{ Vdc}$ )	$h_{FE}$	30		125	
Collector-Emitter Saturation Voltage ( $I_C = 100 \text{ mAdc}, I_B = 20 \text{ mAdc}$ )	$V_{CE(sat)}$			1.0	Vdc

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