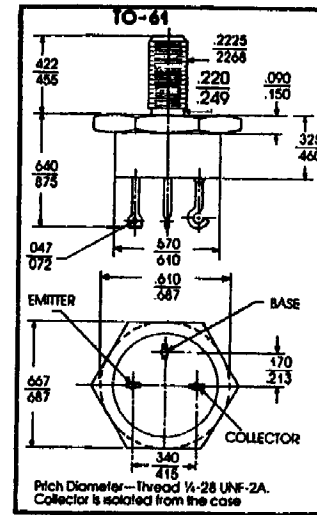
	<h2 style="margin: 0;">NPN POWER TRANSISTORS</h2> <h3 style="margin: 0;">20 &amp; 30 AMP</h3>	<b>2N5329</b> <b>2N5330</b>
---	---	--------------------------------

**GEOMETRY 511**

- I<sub>c</sub> to 30 Amp
- Fast Switching

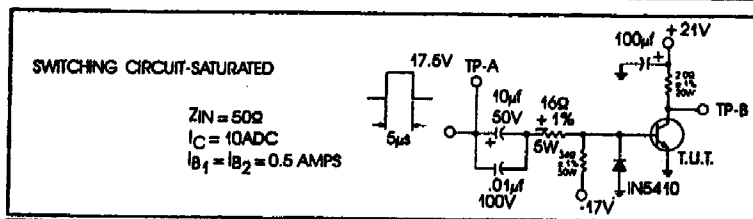
**MAXIMUM RATINGS**

PARAMETER	SYMBOL	2N5329	2N5330	UNIT
Collector-Emitter Voltage	V <sub>CEO</sub>	90	90	V
Collector-Base Voltage	V <sub>CB0</sub>	150	150	V
Emitter-Base Voltage	V <sub>EB0</sub>	8	8	V
Collector Current-Continuous		20	30	A
Collector Current-Continuous -Peak*		30	40	A
Base Current-Continuous		5	5	A
Base Current-Continuous -Peak*		8	8	A
Emitter Current-Continuous		20	30	A
Emitter Current-Continuous -Peak*		30	40	A
Power Dissipation @ T <sub>C</sub> < 100°C		65	80	W
Linear Derating Factor		.650	.800	mW/°C
Peak Power Dissipation @ T <sub>C</sub> < 25°C		1	1	KW
300 μsec PW @ 60 PPS				
Linear Derating Factor		5.7	5.7	W/°C
Storage and Operating Junction Temperature Range		-65°C to +200°C		
Lead Temp. (1/16" ± 1/32" from case)		230°C for 10 seconds		



**ELECTRICAL CHARACTERISTICS AT 25°C CASE TEMPERATURE**  
(unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	2N5329		2N5330		UNIT
			MIN.	MAX.	MIN.	MAX.	
Collector Cutoff Current	I <sub>CEV</sub>	V <sub>CE</sub> = 150V, V <sub>BE</sub> = -.5V, T <sub>C</sub> = 150°C		50		50	mA
Emitter Cutoff Current	I <sub>EB0</sub>	V <sub>CE</sub> = 150V, V <sub>BE</sub> = -.5V, reverse bias		5		10	mA
		V <sub>EB</sub> = 8.0V		5		5	mA
Collector-Emitter Sustain Voltage	V <sub>CEO(sus)</sub>	I <sub>B</sub> = 0, I <sub>C</sub> = 100mA	90		90		V
*DC Forward Current Transfer Ratio	h <sub>FE</sub>	V <sub>CE</sub> = 2V, I <sub>C</sub> = 10A	40	120	40	120	
		V <sub>CE</sub> = 3V, I <sub>C</sub> = 20A	10				
		V <sub>CE</sub> = 3V, I <sub>C</sub> = 30A			10	50	
*Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = 10A, I <sub>B</sub> = .5A				.6	V
		I <sub>C</sub> = 20A, I <sub>B</sub> = 2A		1.8			V
		I <sub>C</sub> = 30A, I <sub>B</sub> = 3A				1.8	V
*Base Emitter Voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> = 10A, I <sub>B</sub> = .3A				1.3	V
		I <sub>C</sub> = 20A, I <sub>B</sub> = 2A		1.7			V
		I <sub>C</sub> = 30A, I <sub>B</sub> = 3A				1.8	V
Turn-On Time	t <sub>ON</sub>	See Diagram Below.		.350		.350	μsec
Turn-Off Time	t <sub>OFF</sub>			1.1		1.250	μsec
High Frequency Beta	h <sub>FE</sub>		V <sub>CE</sub> = 10V, I <sub>C</sub> = 3A, f = 10MHz	8		8	



\* Pulsed.  
Pulse width = 300 μsec. 2% duty cycle.