

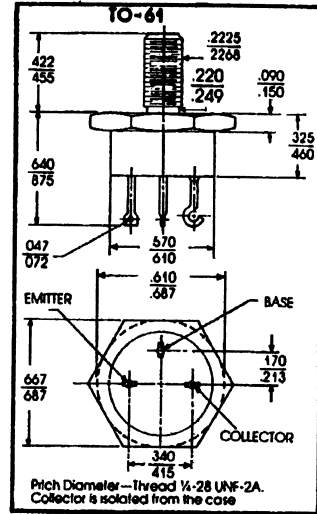
NPN POWER TRANSISTORS

20 & 30 AMP

2N5329
2N5330

GEOMETRY 511

- Ic to 30 Amp
- Fast Switching

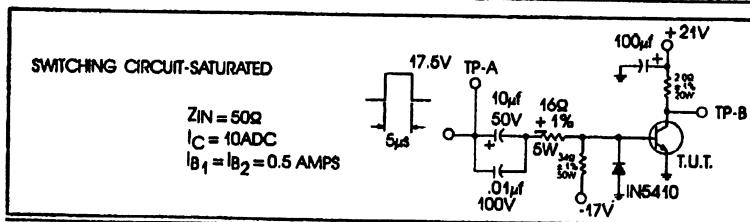


MAXIMUM RATINGS

PARAMETER	SYMBOL	2N5329	2N5330	UNIT
Collector-Emitter Voltage	V _{CEO}	90	90	V
Collector-Base Voltage	V _{CB0}	150	150	V
Emitter-Base Voltage	V _{EB0}	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 _C < 100°C		65	80	W
Linear Derating Factor		650	800	mW/°C
Peak Power Dissipation @ T _C < 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 _{CEV}	V _{CE} = 150V, V _{BE} = -.5V, T _C = 150°C		50		50	mA
Emitter Cutoff Current	I _{EBO}	V _{CE} = 150V, V _{BE} = -.5V-reverse bias	5		10		mA
		V _{EB} = 8.0V	5		5		mA
Collector-Emitter Sustain Voltage	V _{CEO(sus)}	I _B = 0, I _C = 100mA	90		90		V
*DC Forward Current Transfer Ratio	h _{FE}	V _{CE} = 2V, I _C = 10A	40	120	40	120	
		V _{CE} = 3V, I _C = 20A	10				
		V _{CE} = 3V, I _C = 30A			10	50	
*Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C = 10A, I _B = .5A				.6	V
		I _C = 20A, I _B = 2A	1.8				V
		I _C = 30A, I _B = 3A			1.8		V
*Base Emitter Voltage	V _{BE(sat)}	I _C = 10A, I _B = .3A				1.3	V
		I _C = 20A, I _B = 2A	1.7				V
		I _C = 30A, I _B = 3A			1.8		V
Turn-On Time	t _{ON}	See Diagram Below.		.350		.350	μSEC
Turn-Off Time	t _{OFF}			1.1		1.250	μSEC
High Frequency Beta	h _{FE}	V _{CE} = 10V, I _C = 3A, f = 10MHz	8		8		



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

