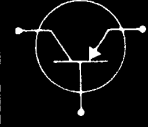


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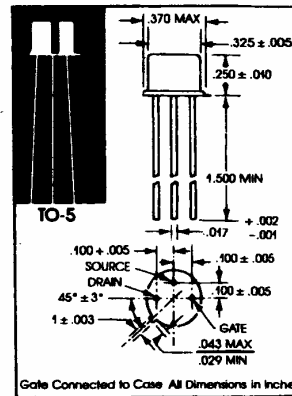
	PNP 3 AMP POWER TRANSISTORS	2N3719 2N3720
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GEOMETRY 505

- High $V_{CE(sus)}$ - to 60V
- Low $V_{CE(sat)}$ - 0.75 Vdc
- High f_T - 60 MHz min.

MAXIMUM RATINGS

PARAMETER	SYMBOL	2N3719	2N3720	UNIT
Collector Emitter Voltage	V_{CEO}	40	60	V
Collector Base Voltage	V_{CBO}	40	60	V
Emitter Base Voltage	V_{EBO}	4		V
DC Collector Current		3		A
Peak Collector Current ¹		10		A
Continuous Base Current		.5		A
Power Dissipation $\leq 25^\circ\text{C}$		6		W
Linear Derating Factor ¹		34.3		mW/ $^\circ\text{C}$
Storage & Operating Junction Temp. Range		-65 $^\circ\text{C}$ to 200 $^\circ\text{C}$		
Lead Temperature (1/16" from case)		300 $^\circ\text{C}$ for 10 seconds		



ELECTRICAL CHARACTERISTICS AT 25 $^\circ\text{C}$ CASE TEMPERATURE

PARAMETER	SYMBOL	TEST CONDITIONS	2N3719		2N3720		UNIT
			MIN.	MAX.	MIN.	MAX.	
Collector Cutoff Current	I_{CEX}	$V_{CE} = 40V, V_{BE} = +2V, T_C = 150^\circ$		1			mA
		$V_{CE} = 60V, V_{BE} = +2V, T_C = 150^\circ$			1		mA
		$V_{CE} = 40V, V_{BE} = +2V$		10			μA
		$V_{CE} = 60V, V_{BE} = +2V$			10		μA
Collector Cutoff Current	I_{CBO}	$V_{CB} = 40V, I_E = 0$		10			μA
		$V_{CB} = 60V, I_E = 0$			10		μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 4V$		1		1	mA
Collector-Emitter Sustain Voltage	$V_{CE(sus)}$	$I_B = 0, I_C = 20\text{mA}$	40		60		V
DC Forward Current Transfer Ratio*	hFE	$V_{CE} = 1.5V, I_C = 1A, T_C = 25^\circ\text{C}$	25	180	25	180	
		$V_{CE} = 1.5V, I_C = 1A, T_C = -40^\circ\text{C}$	15		15		
Collector Emitter Saturation Voltage*	VCE	$I_C = 3A, I_B = 0.3A, T_C = -40^\circ \text{ to } +100^\circ\text{C}$		1.5		1.5	V
		$I_C = 1A, I_B = 0.1A, T_C = -40^\circ \text{ to } +100^\circ\text{C}$.75		.75	V
Base-Emitter Voltage*	VBE	$I_C = 3A, I_B = 0.3A, T_C = -40^\circ \text{ to } +100^\circ\text{C}$		2.3		2.3	V
		$I_C = 1A, I_B = 0.1A, T_C = -40^\circ \text{ to } +100^\circ\text{C}$		1.5		1.5	V
DC Forward Current Transfer Ratio	hFE	$V_{CE} = 1.5V, I_C = .5A$	20		20		pf
Turn On Time	t_{on2}	$I_C = 1A, I_{B1} = 100\text{mA}$		100		100	nsec
Turn Off Time	t_{off3}	$I_C = 1A, I_{B1} = 100\text{mA}, I_{B2} = 100\text{mA}$		400		400	nsec
High Frequency Beta	hfe	$V_{CE} = 10V, I_C = 500\text{mA}, f = 30\text{MHz}$	2		2		
Common Base Capacitance	Cobo	$I_E = 0, V_{CB} = 10V, f = 100\text{kHz to } 1\text{MHz}$		120		120	pf
Input Capacitance	Cibo	$V_{BE} = 0.5V, I_C = 0, f = 100\text{kHz to } 1\text{MHz}$		1000		1000	pf

*Pulse test: Width 300 μsec , D.C. $\leq 2\%$

¹See Safe Operating Area Diagram

²See Figure 1

³See Figure 2

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