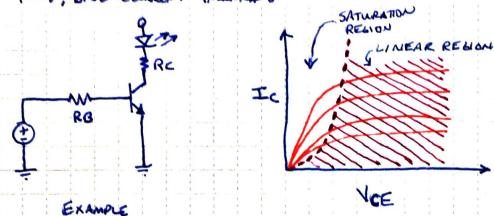
PNP:		
+ TWO BASIC TYPES: NPI  EE #219 FOR ET BASICS  NPN:  BASE **  BASE **	J & PNP  OLLECTOR  IN  EMITTER	COMMON PINOUTS (BUT NOT UNIVERSAL)  TO-92  B C
EE # 219 FOR ET BASICS  NPN:  BASE  BASE	OLLECTOR N N EMITTER	COMMON PINOUTS (BUT NOT UNIVERSAL)  TO-92  B C
PNP:  BASE P  BASE P	N EMITTER	(BUT NOT UNIVERSAL)  TO-92  B C
NPN:  BASE  BASE	N EMITTER	6 c
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		<u>c</u>
DIAGRAM LIKE THIS TO SHOW		<b>本</b>
THE "JUNCTIONS" OF A BIT		- (HPN EXAMPLE)
	1 1 1	
* - WHILE THIS DOES ILLUSTRATE TH	2	E
PH SUNCTIONS, IT ODES NOT		
DESCRIBE THE OPERATION OF THE	637	
(EXCEPT FOR B-E SUMEROW)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

	W2AEW
BASIC OPERATING PRINCIPLES	2
THE BASE-EMITTER JUNCTION BEHAVES LIFE A DIODE	
CURENT CAN FLOW BETWEEN COLLECTOR & EMITTER	
COLOR SETURIOR COLOR TICMINES	
WHEN BASE-EMITTER IS NOT FORWARD - BIASED	
NO CURRENT FLOWS BETWEEN COLLECTOR & EMITTED	
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"ON" "OFF" 1	Tes
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"LINEAR" OPERATION	Tel
· B-E FORWARD BIASED	VCE >
• C-B REVERSE BIASED HOW DO WE GET O	
JUACTON?	
B-E FURLLAD BIASED	TWED)
· C-B FORWALD BIASED	
( VCE YERY SMALE)	

WZAEW

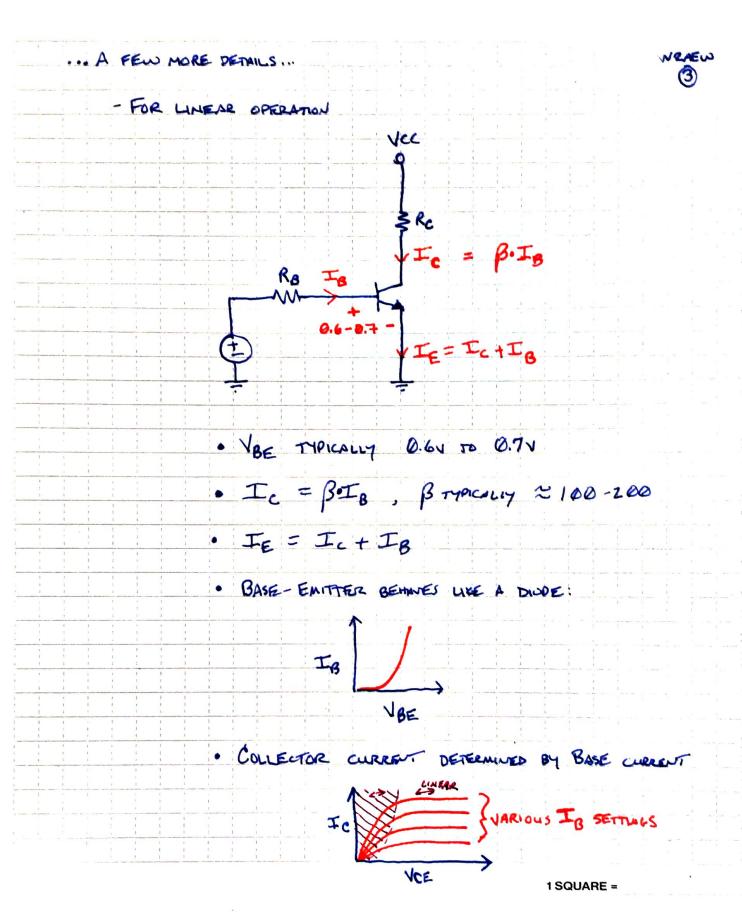
- SWITCH OPERATION : TRANSISTOR IN SATURATION MODE
  - . BASE EMITTER IS FORWARD-BIASED
  - · VOLTAGE DEVELOPED ACESS THE LOAD IN THE COLLECTAL PATH DRIVES THE COLLECTAL VOLTAGE BELOW THE BASE
  - . THIS FORWARD -BLASES THE BASE- COLLECTOR JUNGTION
  - · TRANSISTOR B (CLERENT WALL) DROPS TYPICALLY TO \$ 10-20
  - · THUS, BASE CLURRENT INCREASES



- · IN SATURATION, VCE IS A FEW HUNDERD INV
- · Ic DETERMINED BY SUPPLY NOTIONE I COMO W COLLECTOR PATH

  E Is 2 Ic/10 or 20

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	#190/ #327	191 : C	MERENT	MIREOR Ses & EAR	BASICS			
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	#190/ #327	191 : C	MERENT	MIREOR Ses & EAR	BASICS		Pare And	
	#190/ #327	191 : C	MERENT	MIREOR Ses & EAR	BASICS		Pare And	
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-1-DOK	IT VERY BASIC STRUCTURE & PHYSICS	1 1 1 1
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	E VOLTAGE HIGHER THOM EMPTER	1 1 1 1
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1 1 1 1 1 1 1	TS OF ELECTRONS DRAWN INTO BASE REGION	1 1 1
1 - 512	CE BASE IS YEAR LIGHTLY DOPED - FEW ELECTIONS	1 1 1 1
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1 1 1 1 1 1	E BASK IS 80 THAN IN LOT OF ELECTRONS TRAVEL	1 1 1 2 1 1 1 2
A	ROSS THE BASE, DRAWN BY THE BUSINE POTENTIAL	1 4 1 1 1 1 1
1 1 1 3	THE COLLECTOR	1 1 1
+ Ti	HESE ELECTIONS CROSS THE C-B DEPLETON REGION	1 1 1 1
<u> </u>	NO BECOME THE COLLECTOR CHRENT	
• 0	NET ABOUT 1% OF THE ELECTIONS RE-COMBINE A	-0
	MAKE UP BASE CURRENT	
	99 % OF ELECTIONS FROM EMITTER TRAVEL THEN THE	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1	ASE REGION AND BELONE COLECTOR CURRENT	b t i i t i i i i i i i i i i i i i i i
1 1 1 1 1 1 1		1 1

