M. venkoteswar redoly (162242)

(Vop mox = 62x4 Ilse + Tise + 2 Ilse) Re, when all switches are on (bo, bi, ti, to, -tm)

PL = (25+10) = 25+8=33-1

(Von)mm = 0, when all evertener are OFF (50, 61, ti, tr, ..., tr)

(Vout how = (Vop hoen - (Von) ram

200 - 255 True x Pr

(Nop)mm = 0

(Von)may = 25 Tisex Pic

(Vout)min = (Vop)min - (Vow)mon

VFS = (Vout) max - (Vout) mm

VFS = 510 Issax Pr -> 0

Out gren VFS > 0.8 Vpp

Assume III Vpp = W W

5 10 Insp ×33 > 0-8(1)

Sug> 0.8 = 47.534MA→2

Under proper bracing, the differential pair took (M1 & M2) should operate in saturation.

Under soporation condition

(VD) MI, 2 - (VS) MI, 2 - (VE) MI, 2 - (VL) MI, 2 - (VL)

Under worst care condition

255 ILSB × RL < (Vg)M1,2 + 1VE M1,2

Assume V+p=-0.45V & (Vg)M1,2 = 035V = 0.35V

Tish = 035 + 60.45 | = 080 = 95.064A 255 x 33 = 95.064A Tim = 95.064A -> (4)

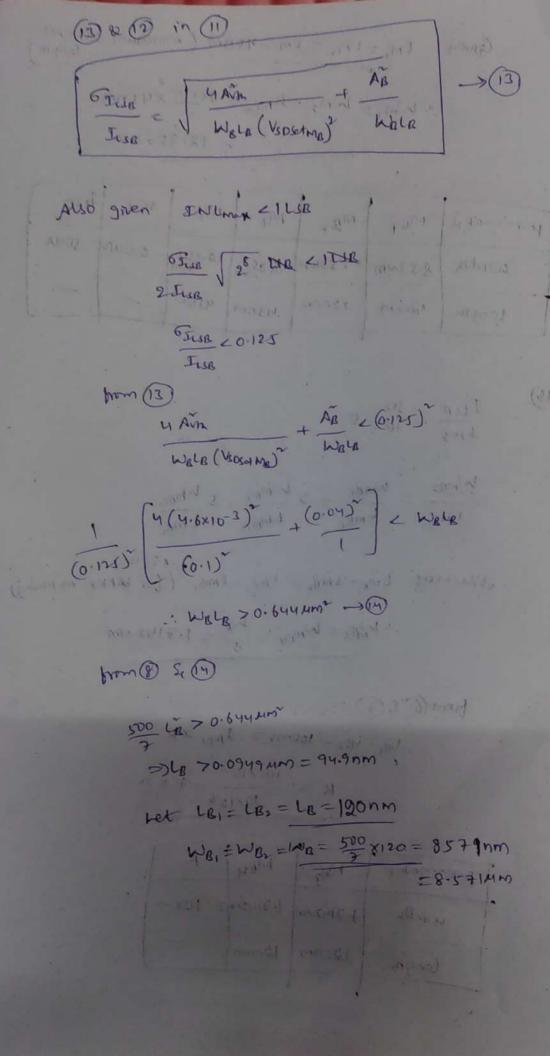
47.534MA = Tisp = 95.06MA

brom 1)

VFS = 5.10 X, 33 X 50 X 10 6

VFS = 0.8415 V

for born txorx to operate in Capolation, VOMB, < (VG) MB, + (Vtp) MB, Vsm, 2 < Voo- (Vspset AR, - (Vspset) MB2 - 5) Since born May & May have some down current & assuming they have some object tohop. (VSDS+) MR = (VSDS+) MR = (VSDS+) MR Dis @ mory (V2) m12 + (V4) M12 < VDB - 2 (VOSET) MB 0-35+0-45 < 1.2-9(ps.+) ma Let Yourne = tooms allso va, = VDD - INTPI - Youte = 1.2-1-0.45) - 0.1 Va,= 0.65V -56 E4 Var = Vpp - Vipset Ry - Vipset Ri - 1Vtp) =1.2 - 0.40x2-0.45



peremeks	Mer 1	MBZ	1211	ML	VF3	THE
widh	8.57 mm	18.531mm	12.85 m	12.857 um	0.84150	SUMA
langh	120nm	1200m	usom	ushm		

When = WME1 = 5 WME4 = 5 WME2.

LMEN = LME1 = 5 WME4 = 5 WME2.

Assumes LMB, = LMB2 = LMB2 = LMB4 (for better matching)

.. WAR = WMRY = WB = 1.7142 MM

from 6 4 9

VBI -VBI = 100mv = IntoXR

R = 100 × 10-30 = 10 K.A.

T parameter	Mag	Mey 2
widh	1.7142 Aun	1.3142mm 10KA
langh	120nm	120nm