

Ref: Michael Kiwanuka "SOA Protection of Linear Power Amplifiers" Fig 28

Reactive load lines:  
Based on Ben Janssen original spreadsheet of David Eather output stage design calculations

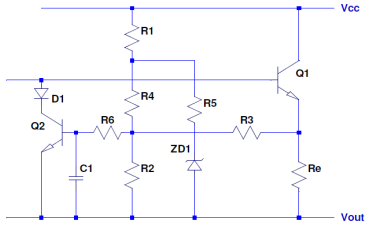


FIG 28

Input	
Result	
Data sheet (approx)	
Protected pairs N	1
Vcc	40.00 V
Re	0.22 $\Omega$
R1	1138.30 $\Omega$
R2	22.72 $\Omega$
R3*	100.00 $\Omega$
R4	398.06 $\Omega$
R5	111.51 $\Omega$
VZD1	10.00 V
VbeQ2	0.6 V
Pmax(W)	At Vout=0 147
	1.364
	0.016
	0.062
	0.390
	0.084

0.0313

\*For N protected pairs of o/p devices, R3 actual = R3xN

Vce	Ic	Vout
0.000	14.000	36.920
36.000	4.000	3.120
79.890	0.500	-40.000

39.176	3.747	0.000	147
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VbeQ2 0.600000 Check Eqn8  
VbeQ2 0.600000 Check Eqn9

