Ref: Michael Kiwanuka "SOA Protection of Linear Power Amplifiers"_Fig 44

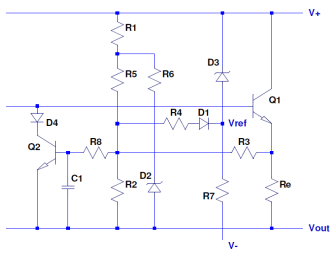

FIG 44 Triple Slope

Input values	
Input Data	
Result	
Data sheet (approx)	

Protected pairs N	1		Pmax(W)
Vcc	35	V	
Re	0.22	Ω	
R1	3000	Ω	0.941
R2	110	Ω	0.003
R3*	227.5	Ω	0.020
R4	3300	Ω	0.062
R5	2000	Ω	0.133
R6	510	Ω	0.047
Vz_{D2}	12	V	0.115
V_{ref}	18	V	
V_{beQ2}	0.6	V	
I_{D1}	0.00432	A	
V_{fD1}	0.6	V	
I_{D2}	0.0096	A	

V_{beQ2}

0.600 Check Eqn8
0.600 Check Eqn9

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

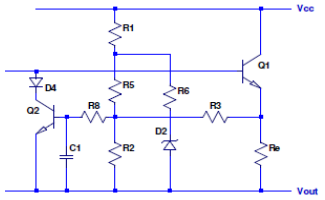

FIG 28 Dual Slope

Vce	Ic	Vout	
0.0000	8.1223	33.2131	Dual
28.5558	2.4735	5.9000	
70.0109	-0.0494	-35.0000	
0.0000	12.4000	32.2720	Triple
15.9053	4.9760	18.0000	
28.5558	2.4735	5.9000	
70.0109	-0.0494	-35.0000	
			S/C
34.5359	2.1095	0.00	72.85

28.556

Delete R4 from Fig 44 eg R4≈ 100GΩ
(Remove D1, D3, R7)