



NPN/PNP=BC547B / BC557B
 NPN2/PNP2=2SA2039/2SC5706
 or BD139 / BD140
 NPN3/PNP3=NUL1302 / NUL3281
 or FLJ4315OTU / FLJ4215OTU
 (aka 2SC5200 / 2SA1943)
 or FLJ44313 / FLJ44213 (TO-3P)
 or MG6330 / MG9410 (TO-3P)
 D5-12 = BAV21 or 1N4148 >120Vb+
 Dim = 1N4007
 U1 = 74HCU04

Clip Pwr optional
 TH1
 RV3 500k Log
 R8a 1Meg
 Min Clip Pwr
 THSOA
 R57 1k
 R56 10k
 R55a 1k
 R55 1k:2W
 80C Outcut on spreader
 RV1 Re=10k
 RV2 50k
 RV3 500k Log
 R56a 39k+
 R11 10k
 R13a 330
 R57 1k
 R56 10k
 R55a 1k
 R55 1k:2W
 80C Outcut on spreader

50mA Bias

~.470R to suit
 pwr tr betas
 & Ic DC SOA

REF1
 5A F
 optional
 C8 47n
 R39 22R:2W
 PwrCom
 C10a 100n
 C10b 100n
 RL 8R
 Sp+

+12V
 +42V FL
 Vpos
 -12V
 -42V FL
 Vneg