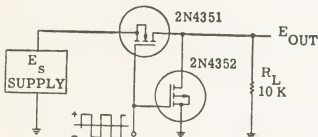


Fig. 13-1. MOSFET analog switching circuit (chopper) for large input voltages (M).



MAXIMUM CHOPPING FREQUENCY $f_{\max} \approx 5 \text{ MHz}$
MAXIMUM INPUT VOLTAGE $E_s (\max) \approx +0.5 \text{ V}, -4.0 \text{ V}$

Fig. 13-2. Series-shunt chopper for high-frequency applications using complementary enhancement mode MOSFETs (M).

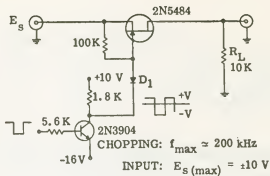


Fig. 13-3. Series chopper for large input voltages using an N-channel JFET (M).

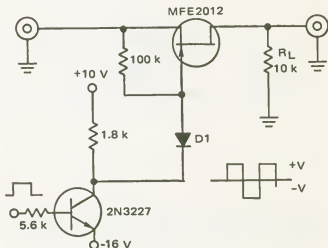
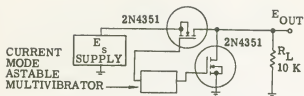


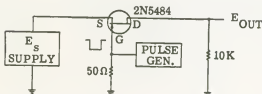
Fig. 13-4. JFET chopper with extended range of ± 10 volts (M).



MAXIMUM CHOPPING FREQUENCY $f_{(max)} \approx 5 \text{ MHz}$

MINIMUM INPUT VOLTAGE $E_s (min) \approx \pm 10 \mu\text{V}$

Fig. 13-5. Series-shunt chopper for low input voltages (M).



MAXIMUM CHOPPING FREQUENCY $f_{(max)} \approx 200 \text{ kHz}$

MAXIMUM INPUT VOLTAGE $E_s (max) \approx +2 \text{ V}, -0.4 \text{ V}$

Fig. 13-6. Series chopper using an N-channel JFET (M).

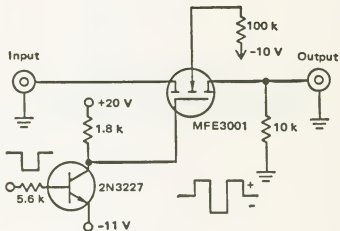


Fig. 13-7. MOSFET chopper with extended range of ± 3 volts (M).