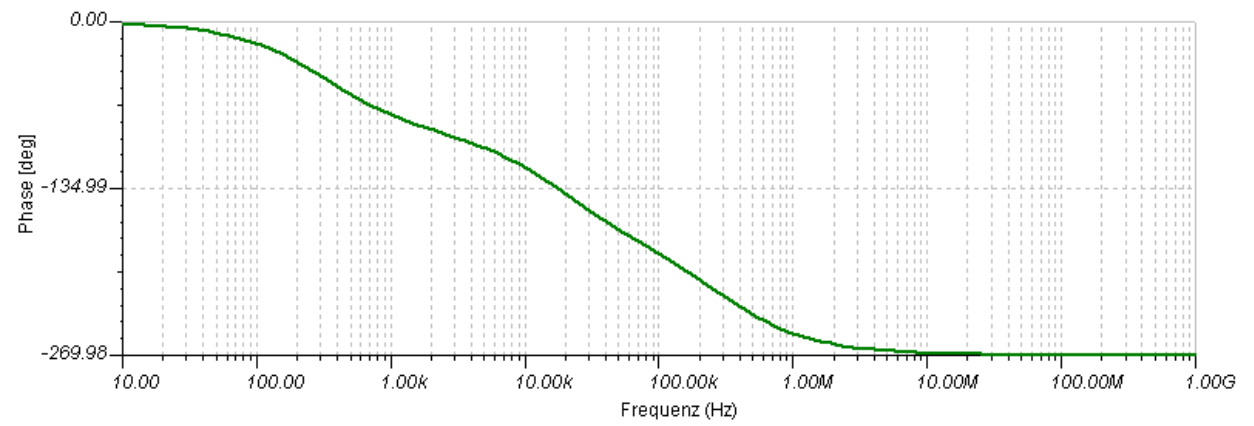
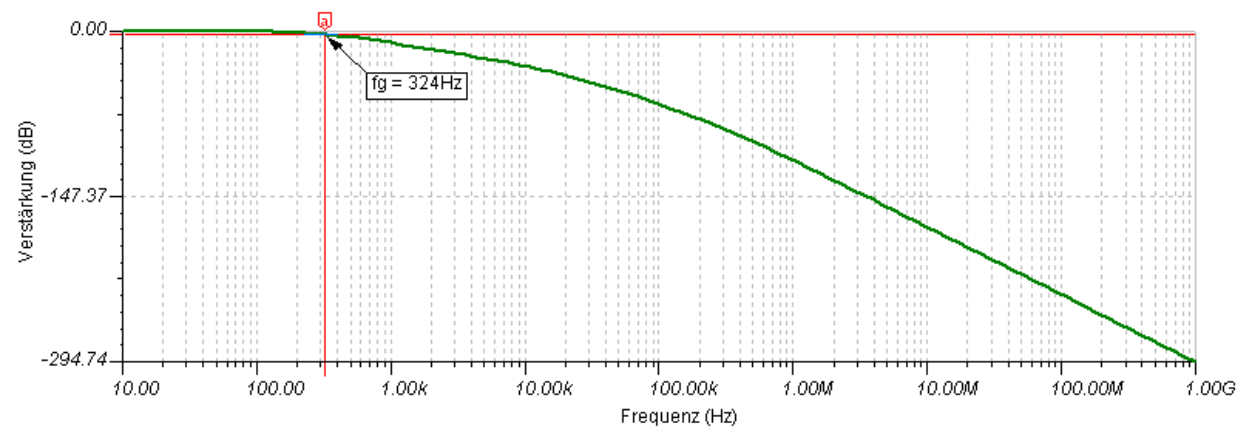
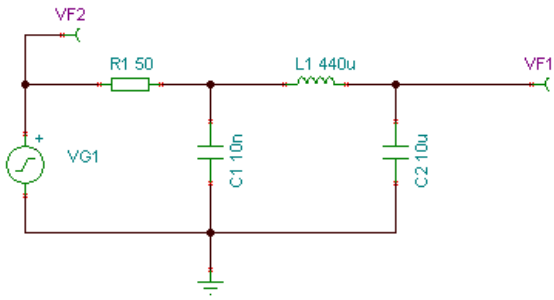
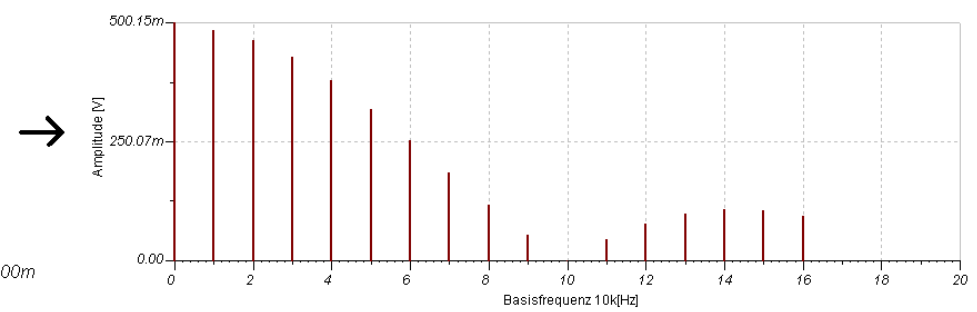
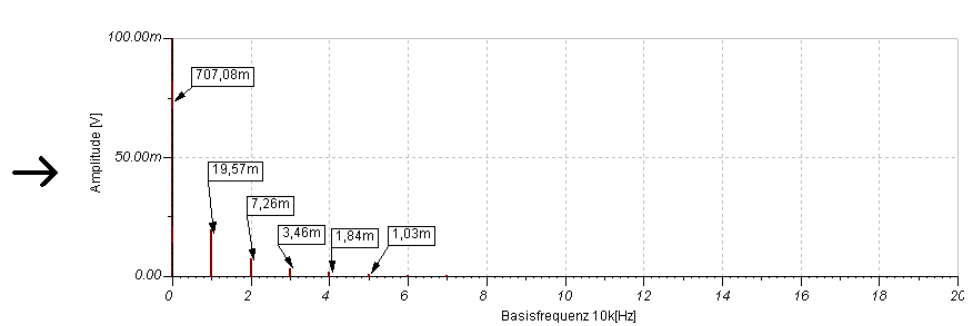
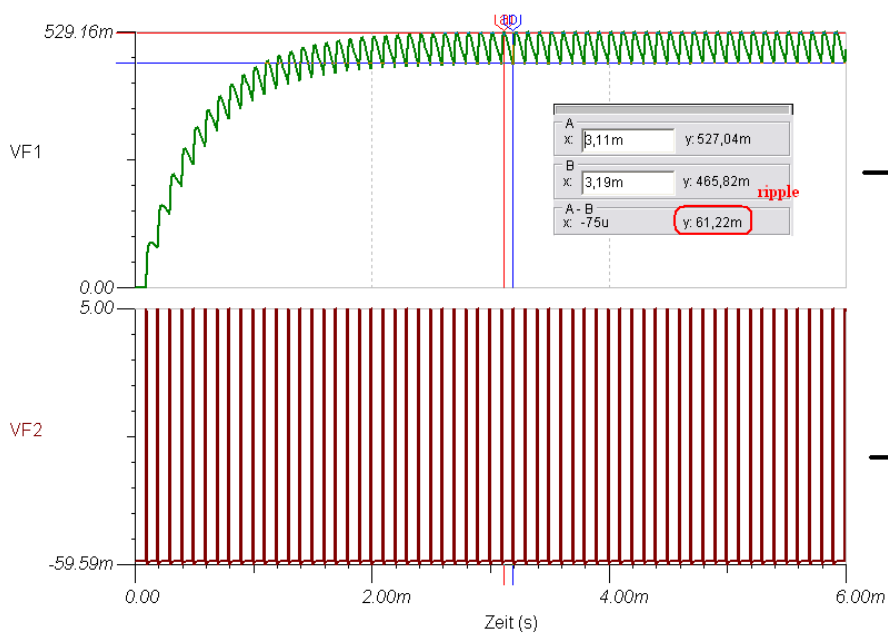


## PWM-Vergleich Duty-Cycle

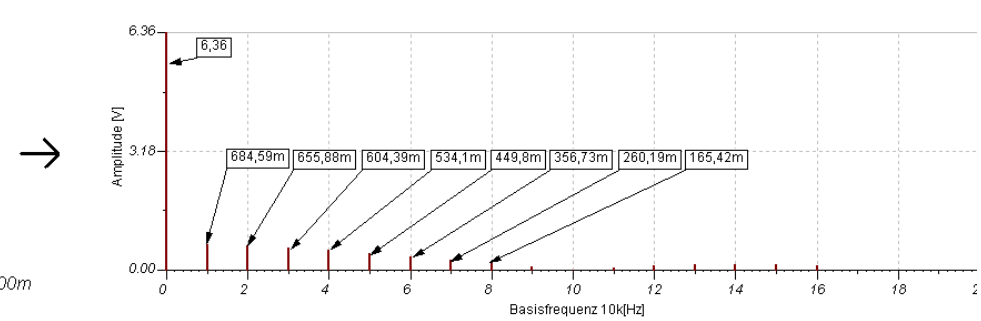
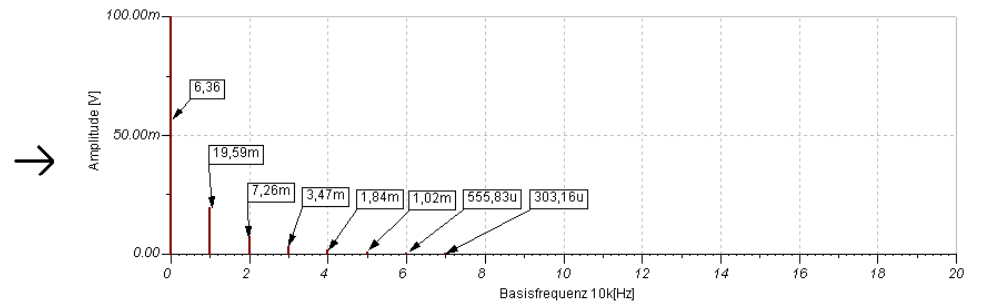
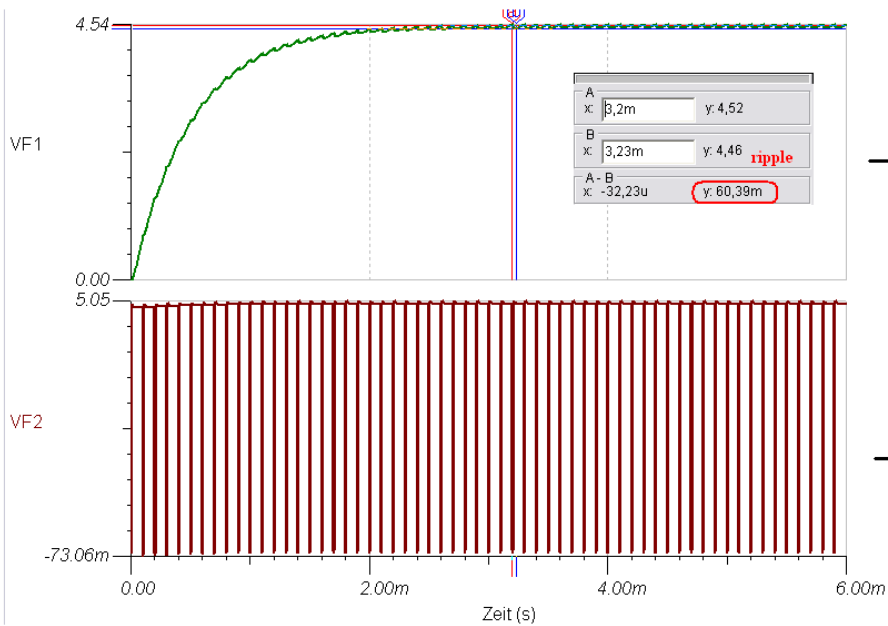
Filter mit Grenzfrequenz 300Hz



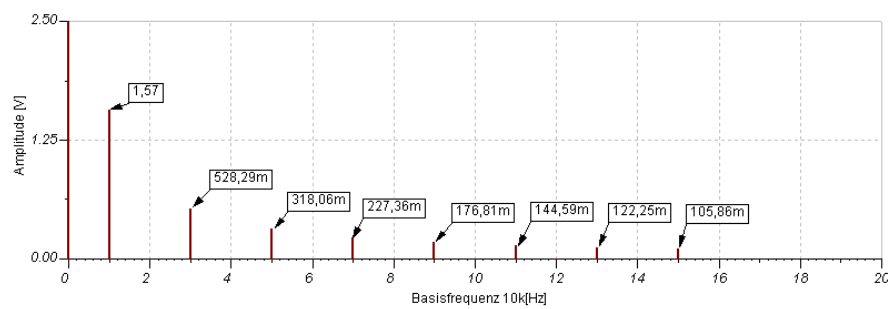
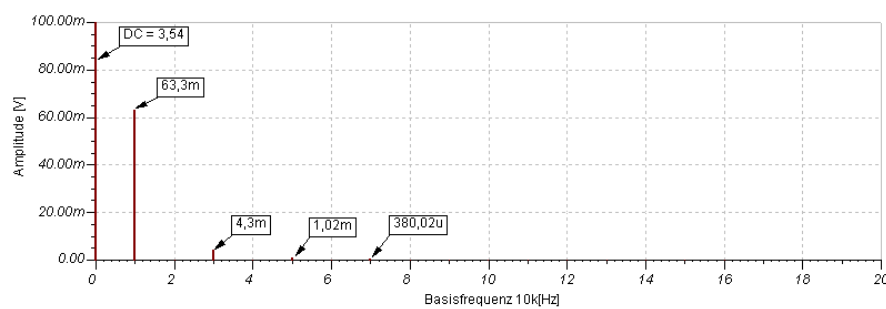
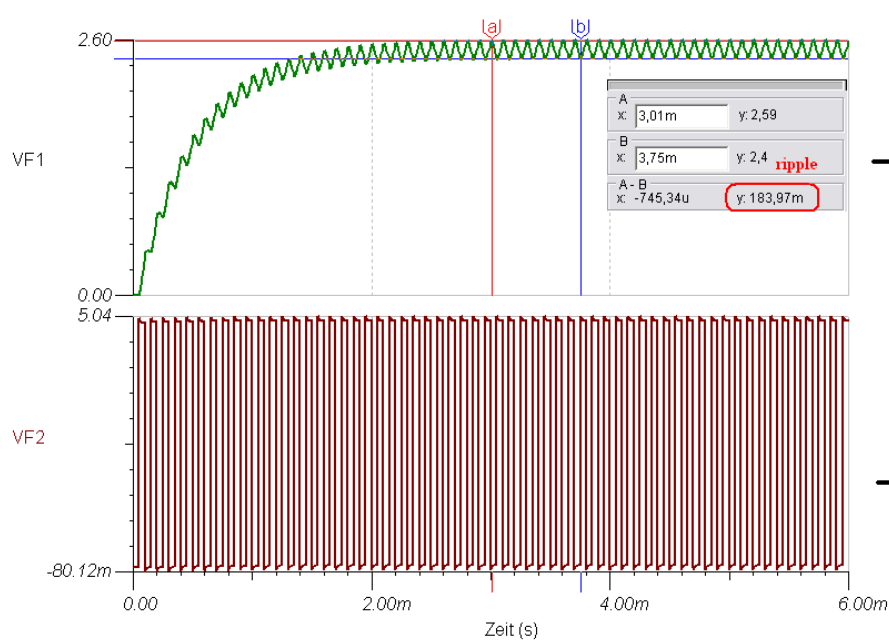
PWM 10kHz ( $u_{s-s} = 5V$ ) duty cycle = 10%



PWM 10kHz ( $u_{s-s} = 5V$ ) duty cycle = 90%



PWM 10kHz ( $u_{s-s} = 5V$ ) duty cycle = 50%



Duty Cycle 50% am kritischsten, da dann ein Rechteck nur noch ungerade Oberschwingungen besitzt und sich die Leistung breiter auf das Spektrum verteilt. Wird an dieser Stelle gefiltert, entsteht der größte Ripple.