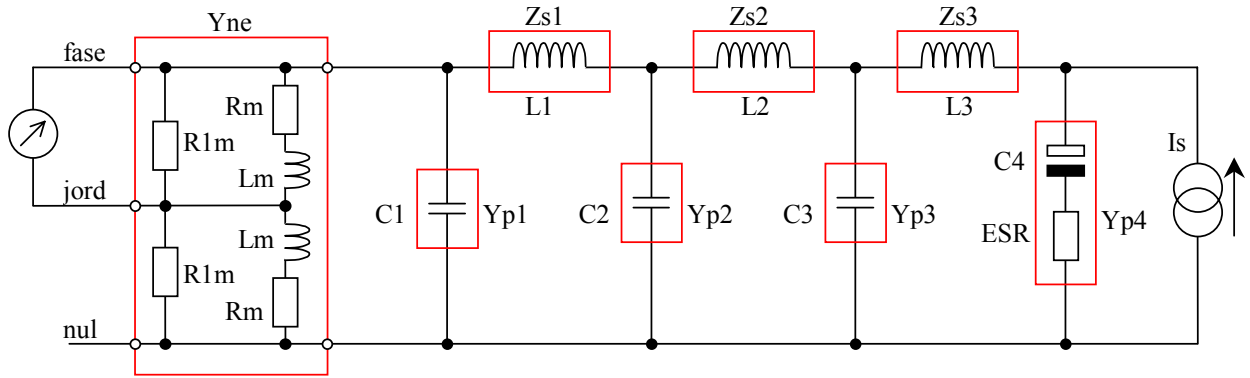


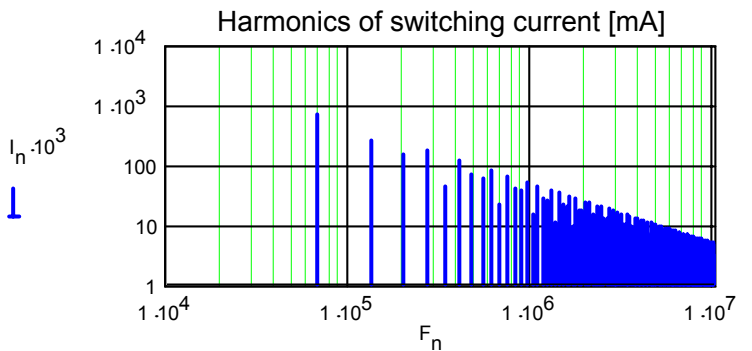
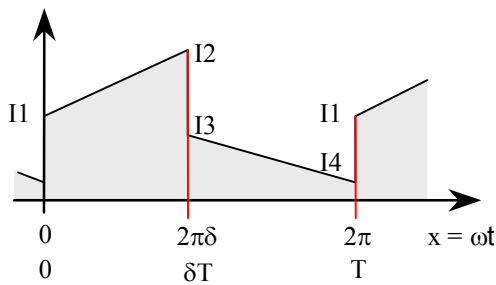
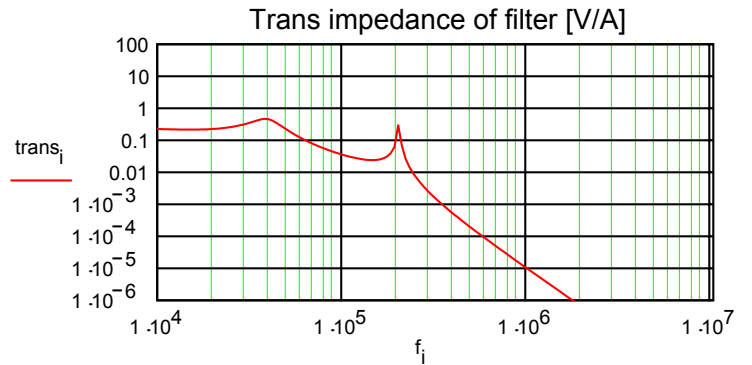
Filter component values and current shape



LISN : Component values of the filter :

$R1m \approx 50$	$L1 \approx 9.6 \cdot 10^{-6}$	$L2 \approx 100 \cdot 10^{-6}$	$L3 \approx 0 \cdot 10^{-6}$
$Rm \approx 5$	$C1 \approx 220 \cdot 10^{-9}$	$C2 \approx 100 \cdot 10^{-9}$	$C3 \approx 0.001 \cdot 10^{-6}$
$Lm \approx 50 \cdot 10^{-6}$		$ESR3 \approx 0$	$C4 \approx 220 \cdot 10^{-6}$
			$ESR4 \approx 0.6$

- Calculate harmonics $n \approx 1 \dots 150$
- Current after 1st jump $I1 \approx 0.8$
- Current before 2nd jump $I2 \approx 1.5$
- Current after 2nd jump $I3 \approx 0$
- Current before 1st jump $I4 \approx 0$
- Duty-cycle $\delta \approx 0.4$
- Switching frequency $fs \approx 67 \cdot 10^3$



- Note that
- The two current slopes do not have to be opposite
 - one or both slopes can be zero
 - the jumps do not have to be of opposite polarity
 - one or both jumps can be zero

So this waveshape definition can be used to describe quite a lot of current shapes, that occur in switching power supplies.

