Řešení testu RLC v sérii

u

i

L

RS

C

uRs

uL

uC

uC

uL

uRs

i

uC

uL

uRs

uC-uL

u

i

uC

uL

uRs

uL-uC

u

i

f > f0

f < f0

f = f0

uC

uL

|  |  |  |  |
| --- | --- | --- | --- |
| Řešení:UL = XL\*IUC = XC\*IUR  = R\*I ω = 2πfXL = ω\*L$X\_{c}=\frac{1}{ωC}$ I = U/Z cos ϕ = R/Z |  |  |  |
|  | 628,32 | s-1 |
| XL | 62,832 |  |
| XC | 15,915 |  |
| Z | 47,971 |  |
| I | 0,208 |  |
| UR | 2,08 | V |
| UL | 13,069 | V |
| UC | 3,31 | V |
|  | 77,97 |  |