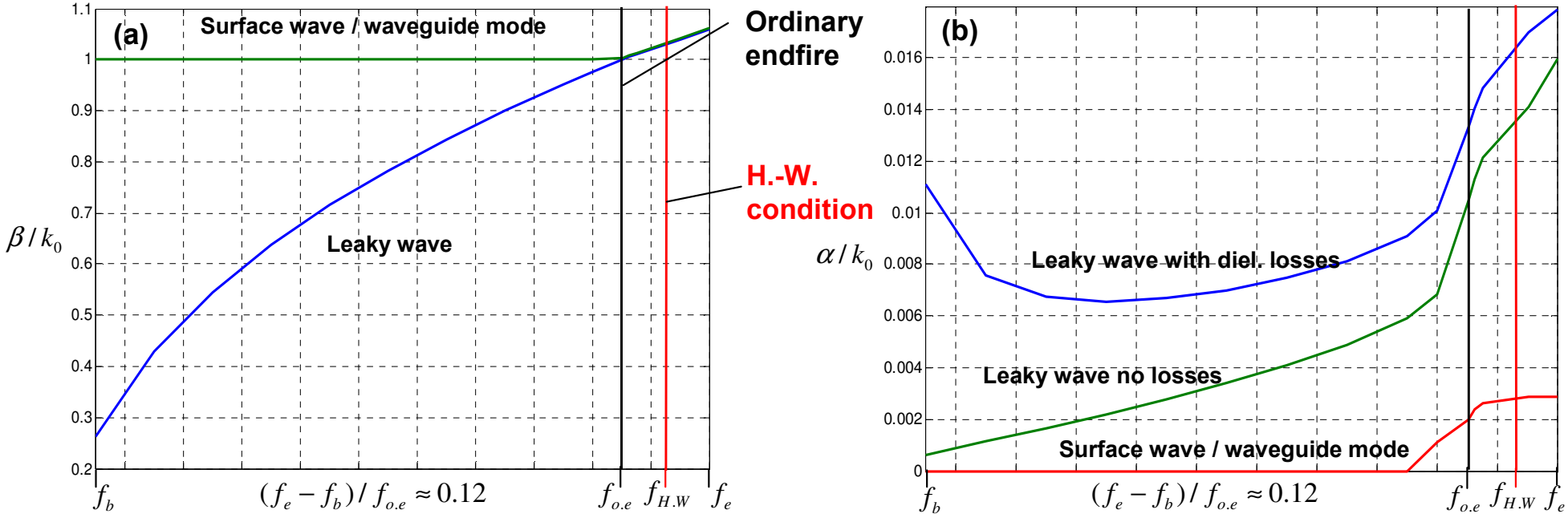
(a)
Surface wave / waveguide mode
Ordinary endfire
H.-W. condition
Leaky wave
β / k_0
1.1
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
f_b
$(f_e - f_b) / f_{o.e} \approx 0.12$
$f_{o.e}$
$f_{H.W}$
f_e
(b)
α / k_0
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
Leaky wave with diel. losses
Leaky wave no losses
Surface wave / waveguide mode
f_b
$(f_e - f_b) / f_{o.e} \approx 0.12$
$f_{o.e}$
$f_{H.W}$
f_e