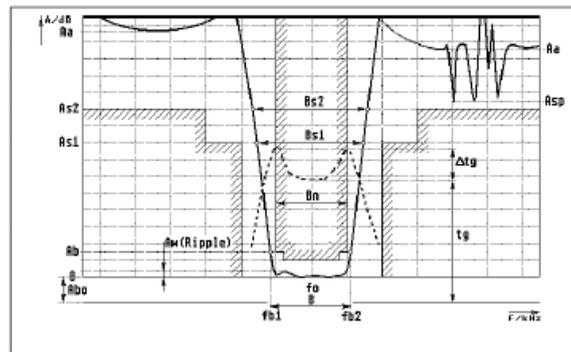


## Crystal Filter

<b>Nominal Frequency <math>f_0</math>:</b>	<b>9.0000 MHz</b>
Pole:	T.B.D.
Pass Bandwidth @ 3dB:	250 Hz, 500 Hz, 600 Hz, 1 kHz ( $\pm 125$ , $\pm 250$ , $\pm 300$ and $\pm 500$ Hz)
Stopband Attenuation:	To Be Defined by the customer
Insertion Loss:	will be defined by QuartzCom
Terminating impedance:	will be defined by QuartzCom
Drive Level:	will be defined by QuartzCom
Operating temperature range:	To Be Defined by the customer
Package:	will be defined by QuartzCom



$f_0$	Nominal frequency	indicates the nominal center frequency of the band-pass or the nominal stop frequency of a band-stop filter.
$f_c$	Centre frequency	The really centre frequency of the band-pass: $f_c = \sqrt{f_{b1} * f_{b2}}$ , approximately: $f_c = \frac{f_{b1} + f_{b2}}{2}$
$A_{bo}$	Insertion loss	The logarithmic ratio of the power delivered to the load impedance before insertion of the filter to the power delivered to the load impedance after insertion of the filter.
$B_n$	Nominal bandwidth	Minimal bandwidth of the pass-band at the attenuation $A_b$
$B$	Bandwidth	Really bandwidth at the attenuation $A_b$ : $B = f_{b2} - f_{b1}$ Note: Often the bandwidth is given as $B = \pm B/2$
$B_s$	Stop-bandwidth	Really bandwidth at the attenuation $A_s$
$A_b$	Attenuation at B	Attenuation at bandwidth referred to insertion loss
$A_w$	Ripple	The difference between the maximum and minimum attenuation within the pass-band (B) unless otherwise specified.
$A_s$	Stop-band attenuation	Attenuation at bandwidth $B_s$ referred to insertion loss
$A_a$	Alternate attenuation	Attenuation in a frequency range far outside of the pass band
$A_{sp}$	Spurious response	Minimum attenuation caused by extraordinary response in the stop-band. Spurious response usually appears at higher frequency than the center frequency.
$t_g$	Group delay	Absolutely group delay
$t_g$	Group delay distortion	The difference between the maximum and minimum group delay within the pass-band (B) unless otherwise specified.

Terms and Definitions