

Specification	QF3000	Issue: 01	Date: 2003-03-10
Filter type : Front End (Antenna) Crystal Filter			

Parameter	min.	typ.	max.	Unit	Condition
Frequency range	135		180	MHz	
Standard frequencies				kHz	
Pass bandwidth	±7,0			kHz	@ 3 dB
Pass band ripple			1	dB	@ fo ± 4 kHz
Insertion / transducer attenuation			6	dB	
Shape factor SF					... dB / ... dB
Selectivity					
			±30	kHz	@ 20 dB
			±60	kHz	@ 45 dB
				kHz	@ ... dB
Spurious response attenuation	25			dB	
Ultimate attenuation	50			dB	
Termination					
Input		50 // 0		Ω // pF	
Output		50 // 0		Ω // pF	
Group delay				μs	
Input Power					
nominal		0,1		mW	
Maximum (for 10 sec)			1	mW	
Operating temperature range	0		+60	°C	
Operable temperature range	-20		+70	°C	
Storage temperature range	-40		+85	°C	
Enclosure (see drawing)	33,5 x 23,5 x 13			mm	
Weight				gram	
Packing	bulk				
ESD Sensitivity	1500			V	HBM as in IEC 61000-4-2

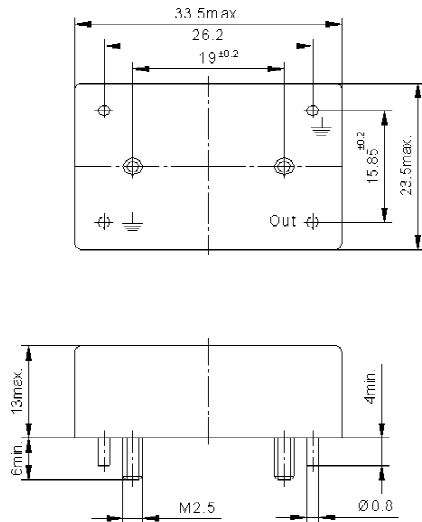
Notes:

1. Terminology and test conditions are according to IEC standard IEC60368-1, unless otherwise stated

Ordering Code:

Model (Specification)	Frequency [MHz]
QF3000	144,250

Enclosure drawing



Pin connections

Terminal	Symbol	Function
1	IN	Input
3	OUT	Output
2,4	GND	Ground, Case

Environmental conditions

Test	IEC 60068 Part ...	IEC 61178-1 clause ...	Test conditions
Visual inspection, dimensions		4.5 4.6	Enclosure styles as in IEC 60368-3, if applicable
Sealing tests	2-17	4.8.2	Gross leak: Test Qc, Fine leak: Test Qk
Solderability Resistance to soldering heat	2-20	4.8.3	Test Ta (235 ± 5)°C Method 1 Test Tb Method 1A, 5s
Shock	2-27	4.8.8	Test Ea, 3 x per axes 100g, 6 ms half-sine pulse
Bump	2-29	4.8.6	Test Eb, 4000 bumps per Axes, 40g, 6 ms
Free fall	2-32	4.8.9	Test Ed procedure 1, 2 drops from 1m height
Vibration, sinusoidal	2-6	4.8.7	Test Fc, 30 min per axes, 10 Hz - 55 Hz 0,75mm; 55 Hz - 2 kHz, 10g
Rapid change of temperature	2-14	4.8.5	Test Na, 10 cycles at extremes of operating temperature range
Dry heat	2-2	4.8.11	Test Ba, 16 h at upper temperature indicated by climatic category
Damp heat, cyclic	2-30	4.8.12	Test Db variant 1 severity b), 55°C/95% r.H., 6 cycles
Cold	2-1	4.8.13	Test Aa, 2 h at lower temperature indicated by climatic category
Climatic sequence	1-7	4.8.14	Sequence of 4.8.11, 4.8.12 (1 st cycle), 4.8.13, 4.8.12 (5 cycles)
Damp heat, steady state	2-3	4.8.15	Test Ca, 56 days
Endurance tests - ageing - extended aging		4.9.1 4.9.2	30 days @ 85°C 1000h, 2000h, 8000h @85°C