



# QEFS21M4B15

SMD Monolithic Crystal Filter – 21.400 MHz  
*Specification (Rev-B)*

---

▣ Electrical Characteristics .....	P01
▣ Environmental Specifications .....	P01
▣ Mechanical Characteristics .....	P01
▣ Test Circuit .....	P02
▣ Marking .....	P02
▣ Reflow Soldering Profile.....	P02
▣ Reel .....	P03

# QEFS21M4B15

SMD Monolithic Crystal Filter – 21.400 MHz  
Specification (rev-A)

November 5th , 2005

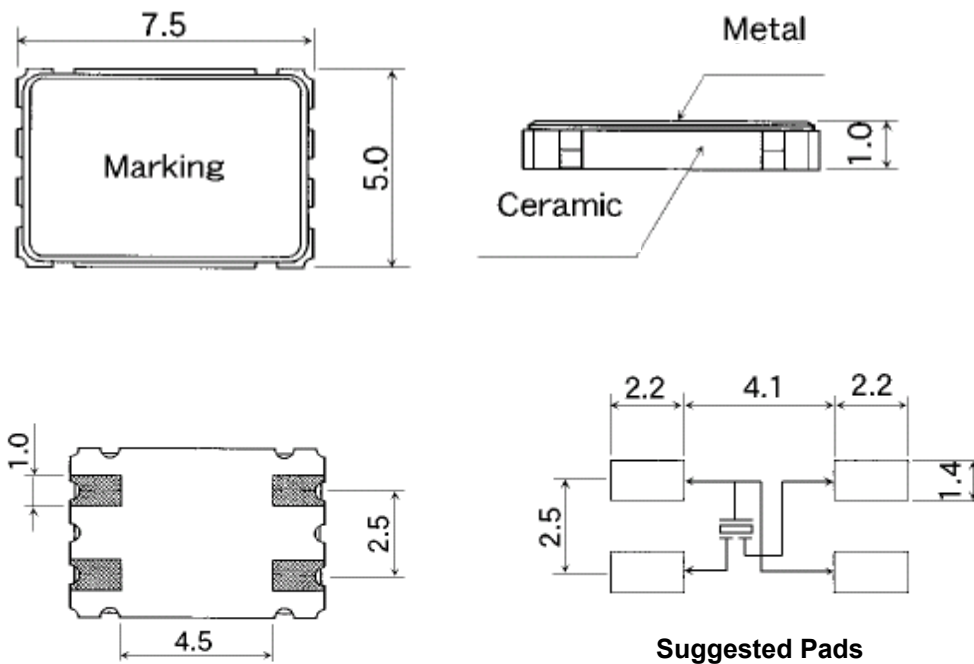
## Electrical Characteristics

Electrical Parameters	Unit	Minimum	Typical	Maximum	Test conditions
Nominal Frequency	MHz		21.400		
Insertion Loss	dB			2.5	
Pass Band at 3.0dB	KHz				
Ripple in pass band	dB			1	
Stop Band attenuation at 35 dB	KHz			±25	
Number of Poles			4 (2XSMD Package)		
Guaranteed attenuation At fo -910 KHz ± 10 KHz	dB	80	-		
Spurious Response	dB	40			
Terminating Impedance	KΩ//pF		1500 // 0.5	-	

## Environmental Specifications

Electrical Parameters	Unit	Minimum	Typical	Maximum	Case Qty
Operating Temperature	°C	-20		+70	2

## Mechanical Characteristics

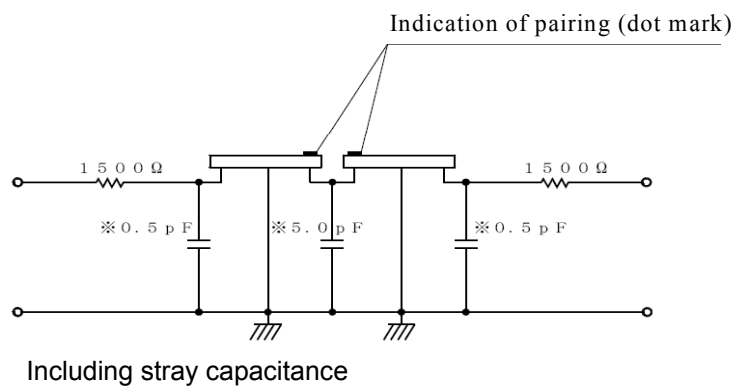


# QEFS21M4B15

SMD Monolithic Crystal Filter – 21.400 MHz  
Specification (rev-A)

November 5th , 2005

## Test Circuit 4 Poles Mono

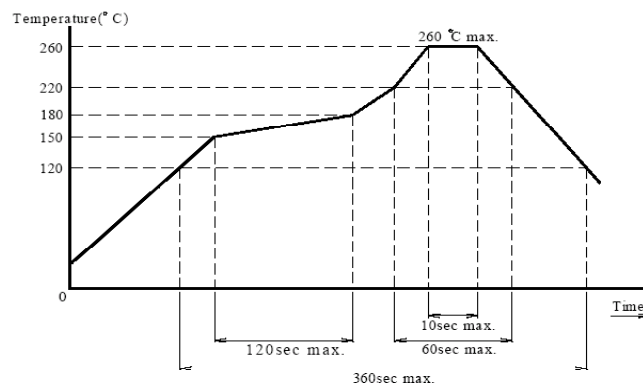


## Marking

IN **21M4B15**  
**TA0527H** OUT

- 21M4B15: Temex P/N
- TA: Temex name
- 0450: Date code (YYWW)
- H: Manufacturing Code

## Reflow Soldering Profile



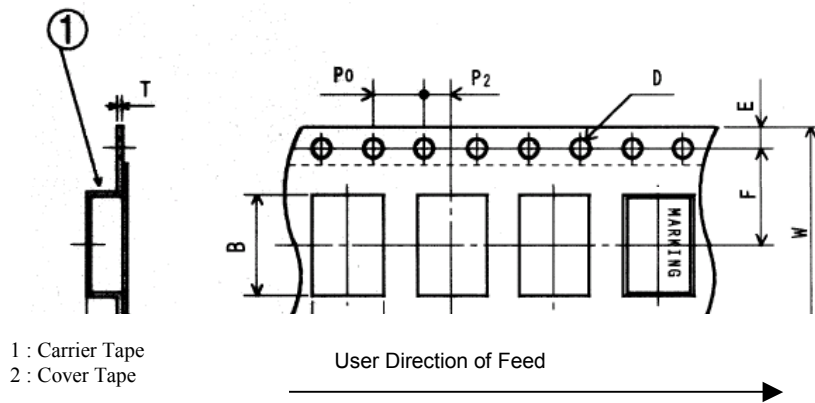
Reflow soldering:  
two times max

# QEFS21M4B15

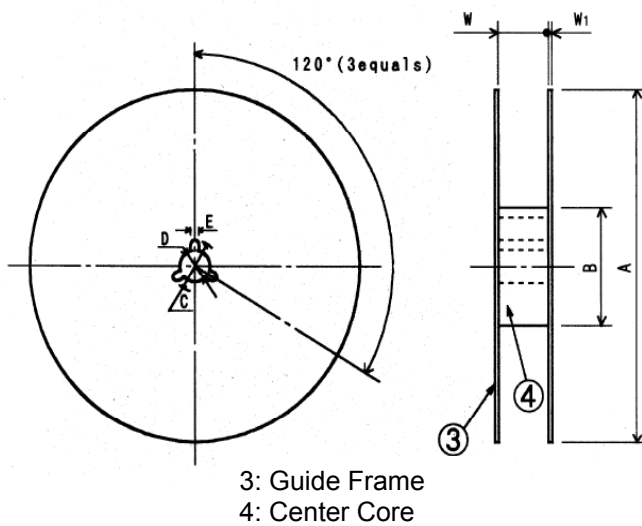
SMD Monolithic Crystal Filter – 21.400 MHz  
Specification (rev-A)

November 5th , 2005

## ▣ Tape & Reel



	Size (mm)
A	5.4
B	7.9
D	Ø 1.5
E	1.75
F	7.5
P <sub>0</sub>	4.0
P <sub>1</sub>	8.0
P <sub>2</sub>	2.0
T	0.4
T <sub>1</sub>	1.7
W	16.0



	Size (mm)
A	Ø 178
B	Ø 80
C	Ø 21
D	Ø 13
E	2.0
W	17.5
W <sub>1</sub>	20

Multiple : 1Kpcs/reel