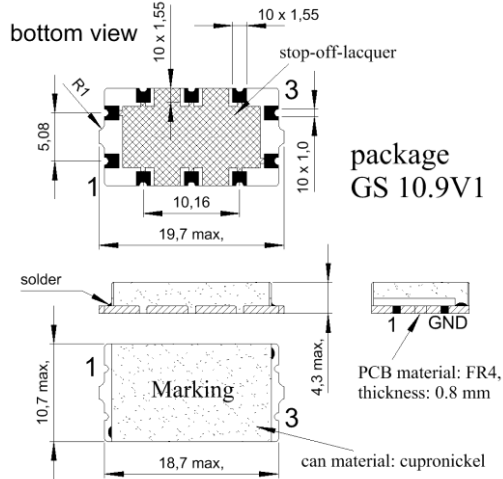


Specification for monolithic crystal filter:

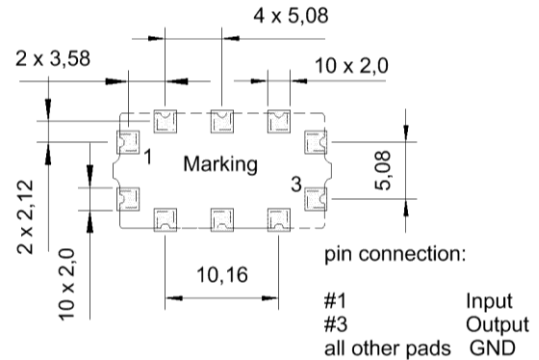
MQF 45.0 - 1500 / 66

1. General

1.1. Package:



recommended footprint for package GS 10.9V1
top view

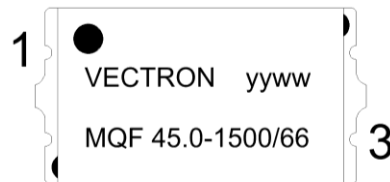


- | | |
|-----------------------------------|------------------|
| 1.2. Type name: | MQF 45.0-1500/66 |
| 1.3. Number of poles: | 8 |
| 1.4. Operating temperature range: | -30°C to +70°C |
| 1.5. Storage temperature range: | -45°C to +85°C |

2. Electric values

- | | |
|---|--|
| 2.1. Nominal centre frequency fo: | 45.0 MHz |
| 2.2. Pass band | |
| 2.2.1. Bandwidth between 3 dB - frequencies: | > fo ± 8.0 kHz |
| 2.2.2. Ripple at fo ± 5.0 kHz | < 2.0 dB |
| 2.2.3. Insertion loss: | < 6.0 dB |
| (measured on smallest attenuation in pass band) | |
| 2.3. Stop band | |
| 2.3.1. fo ± 18 kHz | > 40 dB |
| 2.3.2. fo ± 22 kHz | > 60 dB |
| 2.3.3. fo ± 910 kHz | > 90 dB except spurious |
| 2.4. Terminating impedance R//C (input and output): | 1000 Ω // 0.5 pF |
| 2.5. Maximum input power level: | +5 dBm / +15 dBm (working / non-damaged) |

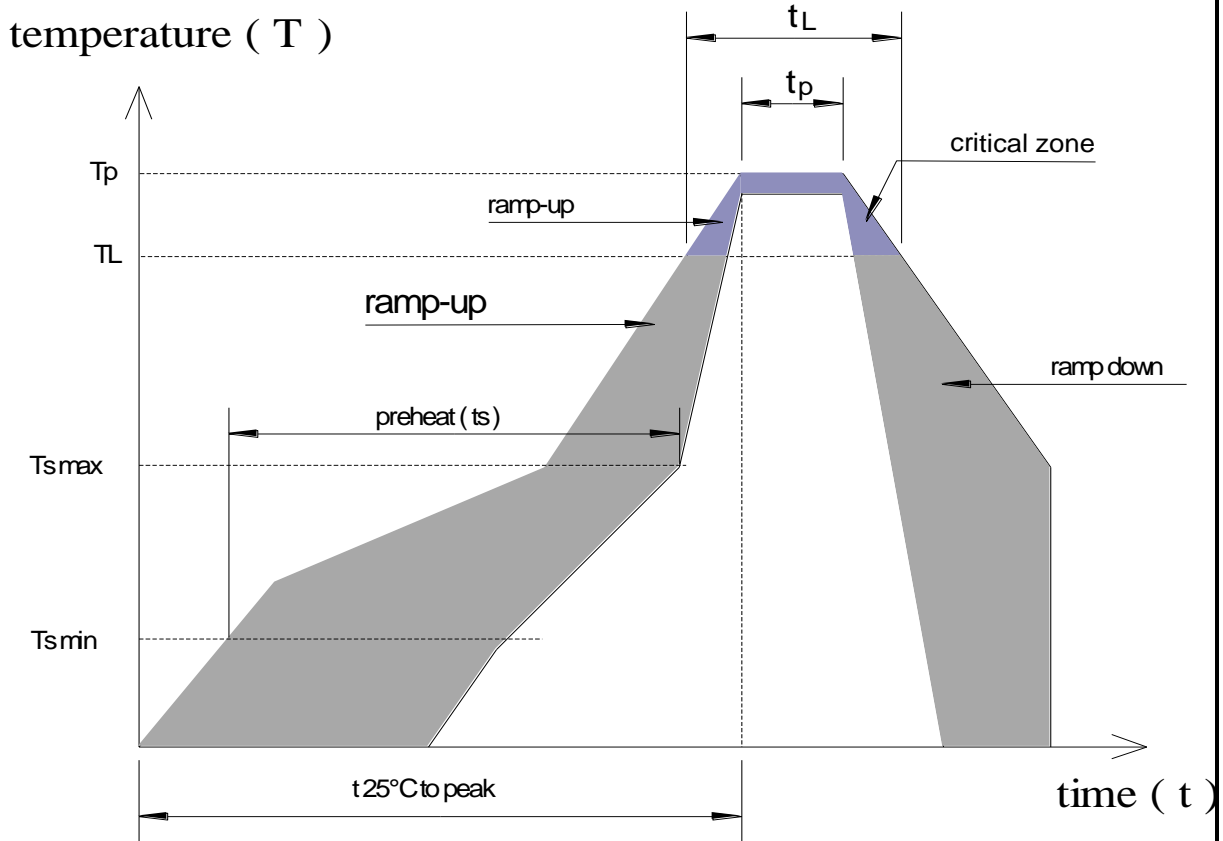
3. Marking:



yy = year of manufacture
ww = week of manufacture

- | | |
|----------------------------|---|
| 4. Environment conditions: | Corresponding to Vectron standard CF001 |
|----------------------------|---|

5. Reflow soldering profile corr. to IPC / JEDEC J-STD-020C



Profile Feature

Average ramp-up rate (T_L to T_p)
 Average ramp-up rate (T_{max} to T_L)
 Preheat:
 - Temperature Min T_{min}
 - Temperature Min T_{max}
 - Time t_s (T_{min} to T_{max})

Time maintained above:
 - Temperature T_L
 - Time t_L

Peak temperature T_p
 Time within 5°C of actual peak temperature T_p
 Ramp-down rate
 Time 25°C to peak temperature

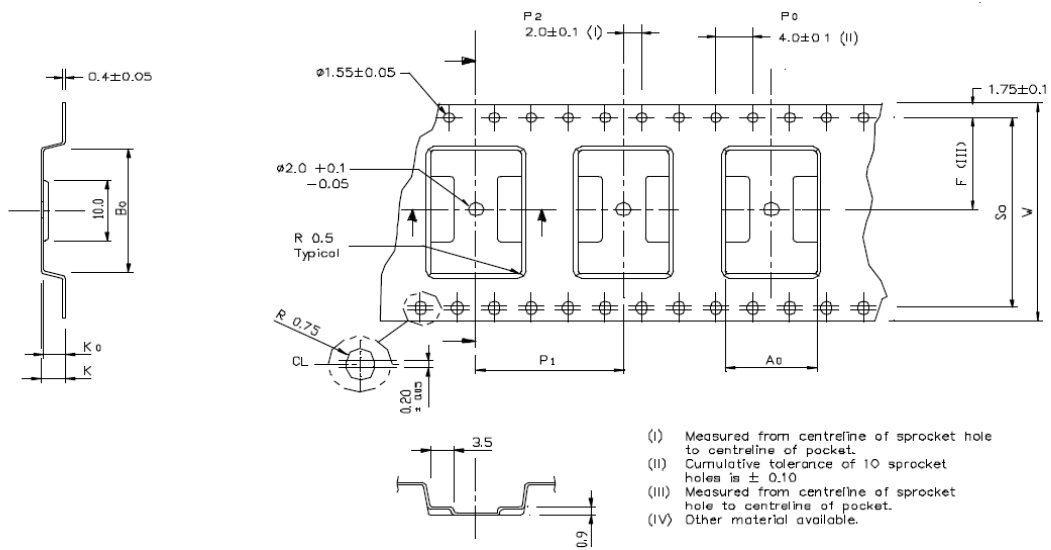
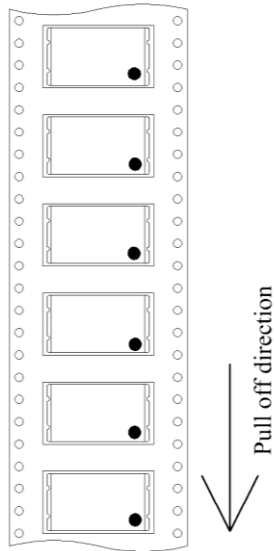
Pb-free assembly

	small body	large body
Average ramp-up rate (T_L to T_p)	3°C / second max.	
Average ramp-up rate (T_{max} to T_L)	3°C / second max.	
Preheat:		
- Temperature Min T_{min}	150°C	
- Temperature Min T_{max}	200°C	
- Time t_s (T_{min} to T_{max})	60-180 seconds	
Time maintained above:		
- Temperature T_L	217°C	
- Time t_L	60-150 seconds	
Peak temperature T_p	260 +0/-6°C	
Time within 5°C of actual peak temperature T_p	10-30 seconds	20-40 seconds
Ramp-down rate	6°C / second max.	
Time 25°C to peak temperature	8 minutes max.	

All temperatures refer to topside of the package, measured on body surface of the package

6. Taping (700 pcs. / reel maximum)

Taping for MQF 45.0-1500/66
maximum 700 pcs. / reel



ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE STATED.

Ao	11.2 ± 0.1
Bo	20.0 ± 0.1
Ko	6.1 ± 0.1
F	14.2 ± 0.1
P1	16.0 ± 0.1
Sp	28.4 ± 0.1
W	32.0 ± 0.3

C-PAK PTE LTD
 Tolerance Unless Specified
 Angle : ° = ± 0' - 30'
 Decimal : .0 = ± .10
 .00 = ± .05
 .000 = ± .02
 Surface Finish: _____

MATERIAL: CONDUCTIVE POLYSTYRENE (IV)		1st Angle	<input type="checkbox"/>
DRAWN: KL NEO	CHECKED	DATE: 26/10/93	3rd Angle <input checked="" type="checkbox"/>
DRAWING NO: CP018/93	SCALE: NTS	REV. DATE: NA	REV. NO: 0
TITLE: OPEN TOOL EMBOSSED CARRIER TAPE DIMENSIONS METRIC - TO 220			

Edited by: _____ date: _____ name: _____