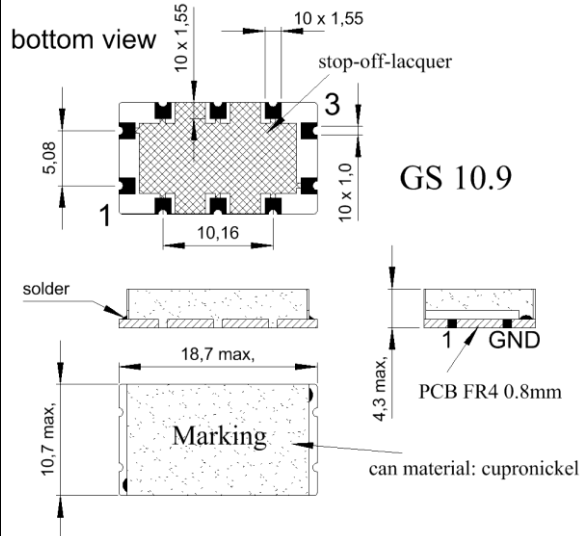


Specification for monolithic crystal filter:

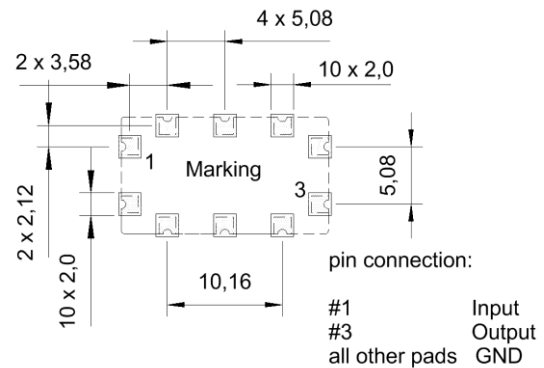
MQF 45.0-1500/66

1. General

1.1. Package:



recommended footprint for package GS 10.9
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

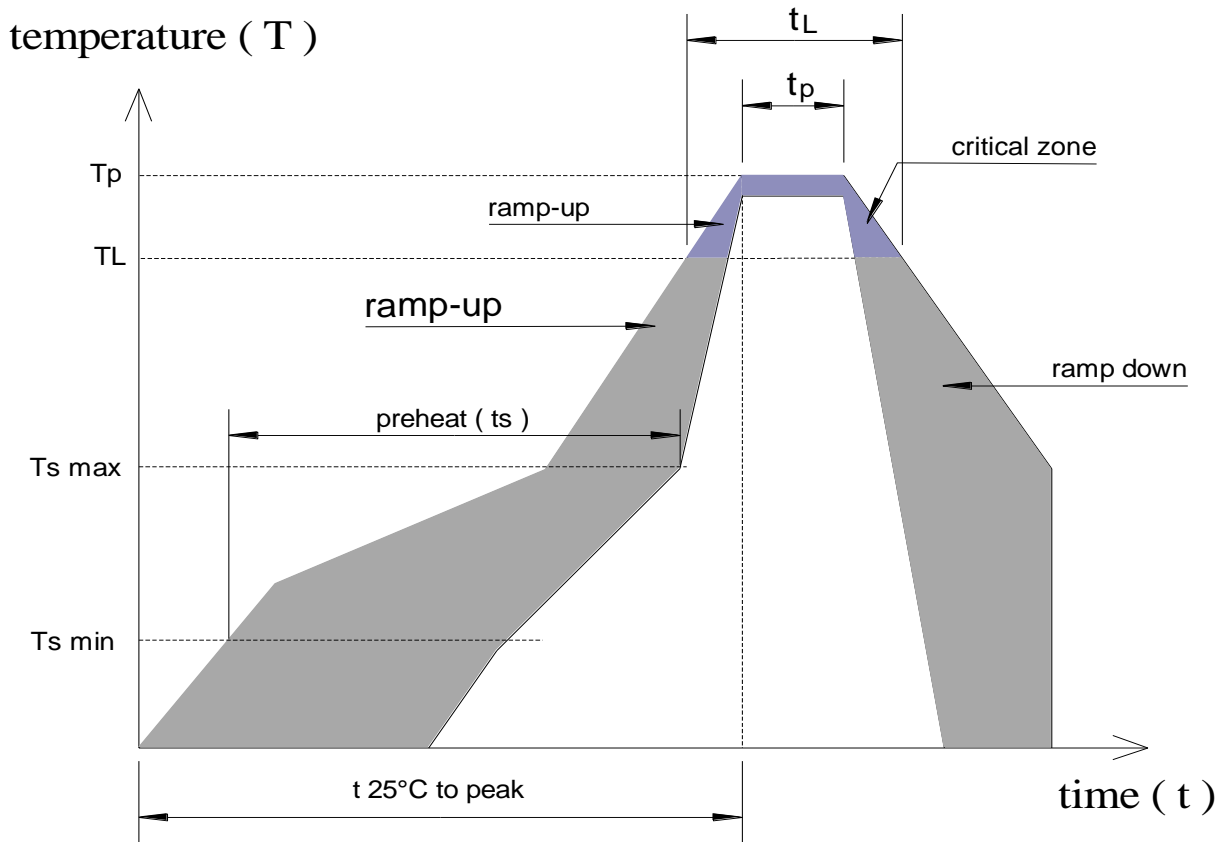
- | | |
|---|--|
| 2.1. Nominal centre frequency f_0 : | 45.0 MHz |
| 2.2. Pass band | |
| 2.2.1. Bandwidth between 3 dB - frequencies: | $> f_0 \pm 8.0$ kHz |
| 2.2.2. Ripple at $f_0 \pm 5.0$ kHz | < 2.0 dB |
| 2.2.3. Insertion loss:
(measured on smallest attenuation in pass band) | < 6.0 dB |
| 2.3. Stop band | |
| 2.3.1. $f_0 \pm 18$ kHz | > 40 dB |
| 2.3.2. $f_0 \pm 22$ kHz | > 60 dB |
| 2.3.3. $f_0 \pm 910$ 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:



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

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

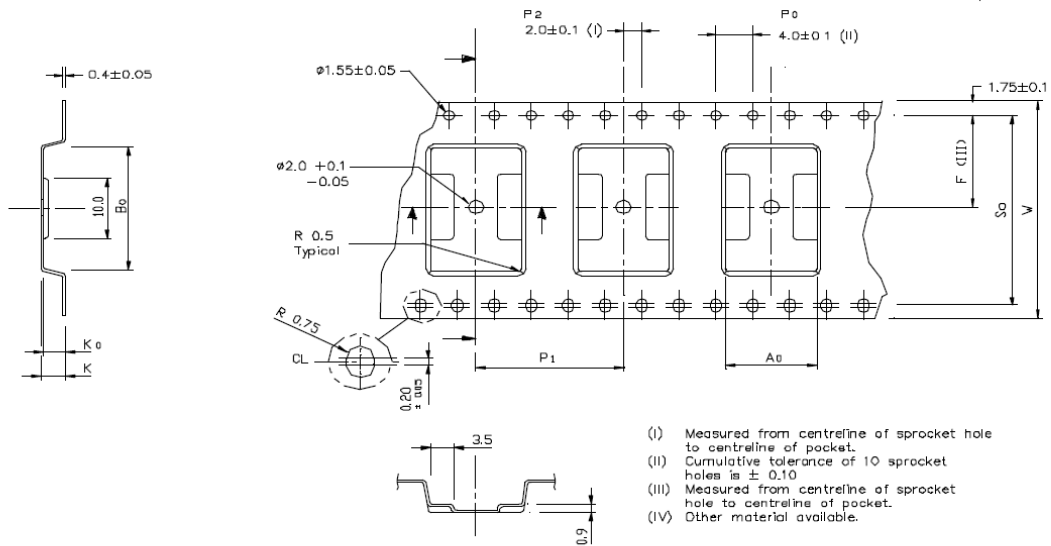
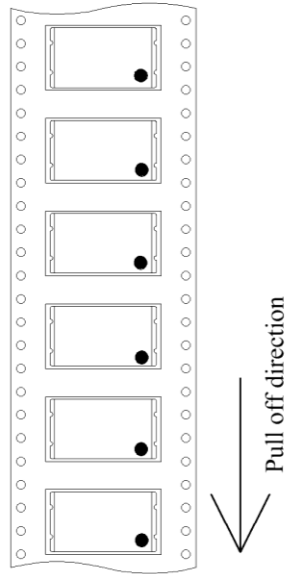


Profile Feature	Pb-free assembly	
	small body	large body
Average ramp-up rate (T_L to T_p)	3°C / second max.	
Average ramp-up rate (T_{smax} to T_L)	3°C / second max.	
Preheat: - Temperature Min T_{smin} - Temperature Min T_{smax} - Time t_s (T_{smin} to T_{smax})	150°C 200°C 60-180 seconds	
Time maintained above: - Temperature T_L - Time t_L	217°C 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



- (I) Measured from centreline of sprocket hole to centreline of pocket.
- (II) Cumulative tolerance of 10 sprocket holes is ± 0.10
- (III) Measured from centreline of sprocket hole to centreline of pocket.
- (IV) Other material available.

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
So	28.4 ± 0.1
W	32.0 ± 0.3

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

MATERIAL: CONDUCTIVE POLYSTYRENE (IV)		1st Angle	<input type="checkbox"/>
		3rd Angle	<input checked="" type="checkbox"/>
DRAWN: KL NEO	CHECKED	DATE: 26/10/93	
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: _____