

CDR9003

**1090 MHz
Ceramic Filter**

**Package Dimensions
11.4 x 7.11 x 4.25**

PART NUMBER:

ELECTRICAL CHARACTERISTICS:

Operating Temperature Range : -40 to +85°C

Center Frequency : $f_c = 1090$ MHz

Passband Width : 10MHz (1085~1095 MHz)

Input / Output Impedance: $50\ \Omega$

Max. Input Power : 1 W

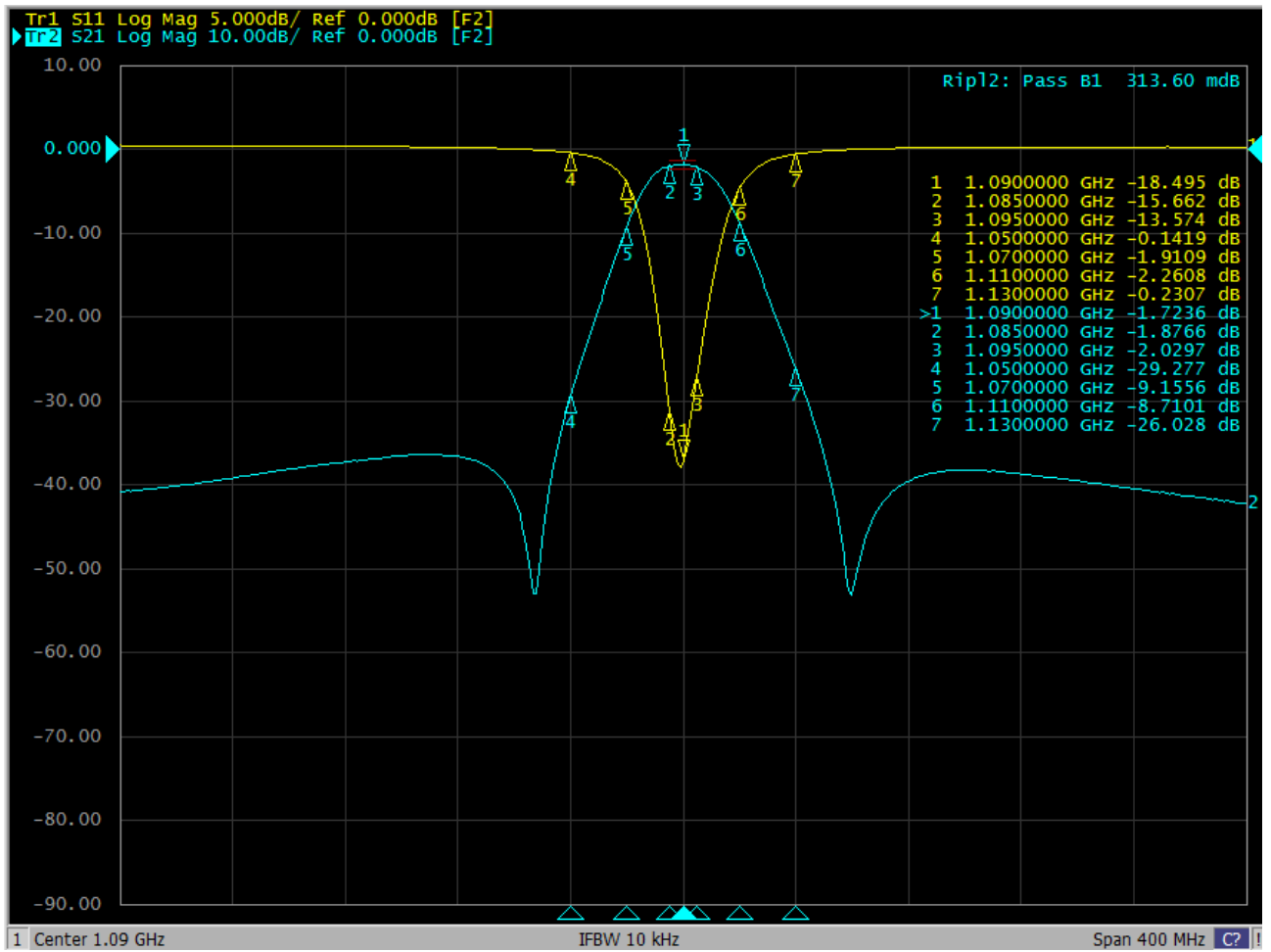
Moisture Sensitivity Level (MSL): 2a

TABLE 1

NO.	ITEM		SPECIFICATION		
			Min	Typ.	Max
1	PASS BAND INSERTION LOSS			2.3 dB	3.0 dB
2	PASS BAND RIPPLE				1.0 dB
3	PASS BAND RETURN LOSS		10 dB	12 dB	
4	STOP—BAND ATTENUATION	1050 MHz	18 dB	23 dB	
		1070 MHz	5 dB	8 dB	
		1110 MHz	5 dB	8 dB	
		1130 MHz	18 dB	23 dB	
Item NO.4 specifies the absolute value of attenuation.					

※Data is measured on EVB board

TYPICAL ELECTRICAL CHARACTERISTICS



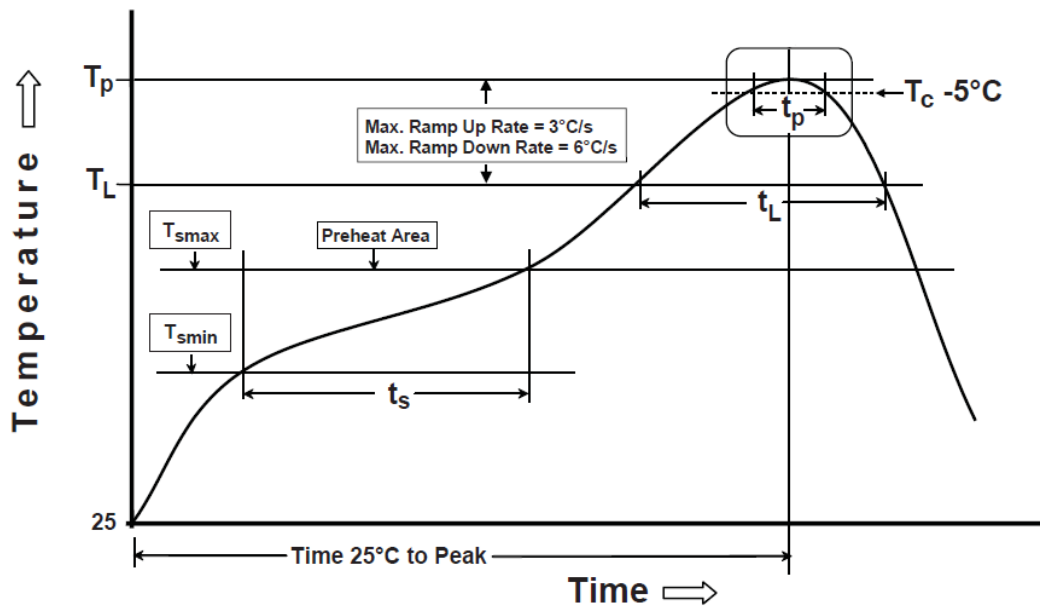
2. Recommended Reflow Soldering Profile

products can be assembled following Pb-free assembly. According to the Standard IPC/ JEDEC J-STD-020C, the temperature profile suggested is as follow:

Phase	Profile features	Pb-Free Assembly (SnAgCu)
PREHEAT	-Temperature Min(T_{smin}) -Temperature Max(T_{smax}) -Time(t_s) form (T_{smin} to T_{smax})	150°C 200°C 60-120 seconds
RAMP-UP	Avg. Ramp-up Rate (T_{smax} to T_P)	3°C/second(max)
REFLOW	-Temperature(T_L) -Total Time above T_L (t_L)	217°C 30-100 seconds
PEAK	-Temperature(T_P) -Time(t_p)	260°C 3 second
RAMP-DOWN	Rate	6°C / second max.
Time from 25°C to Peak Temperature		8 minutes max.
Composition of solder paste		96.5Sn/3Ag/0.5Cu
Solder Paste Model		SHENMAO PF606-P26

Note : All the temperature measure point is on top surface of the component, if temperature over recommend, it will make component surface peeling or damage.

The graphic shows temperature profile for component assembly process in reflow ovens



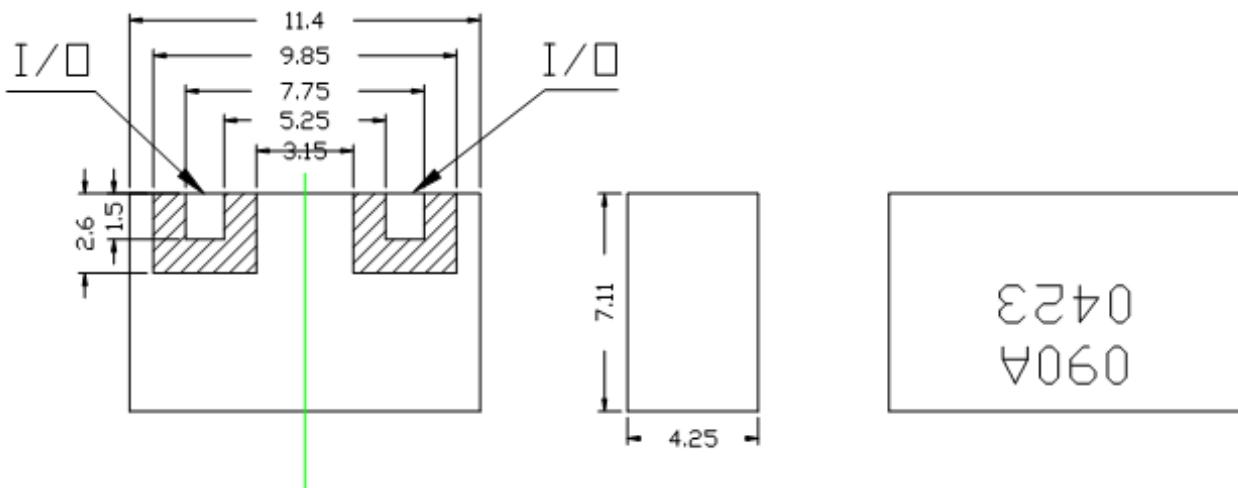
Soldering With Iron:

Soldering condition : Soldering iron temperature 270 ± 10 °C .

Apply preheating at 120°C for 2-3 minutes. Finish soldering for each terminal within 3 seconds, if soldering iron over temperature 270 ± 10 °C or 3 seconds, it will make component surface peeling or damage. Soldering iron cannot leakage of electricity.

3. DIMENSION AND PCB LAYOUT

3-1 SHAPE AND DIMENSION



Dimensions in mm
Tolerance: ± 0.3

090A: product name(J1090A)
04 : month
23 : year(2023)

