

49T

[11.5 * 4.5 * 11.2 mm]

Dip Type
Jacket Type

Fund.

10.7 MHz

10.8 MHz

2 poles

4 poles

6 poles

8 poles

Thru - Hole Type (standard frequency 10.700 MHz) ; available frequency range (10.695 ~ 10.800 MHz)

Channel Spacing (kHz)	Model	No. of poles	Pass Bandwidth		Stop Bandwidth		Ripple dB (max.)	Insertion Loss dB (max.)	Guaranteed Attenuation		Terminating Impedance ohms // pF	Package	
			dB	kHz (min.)	dB	kHz (max.)			dB	kHz		Tandem set	One package
12.5	10M7.5A	2	3	± 3.75	20	± 18	0.5	1.5	35	±300 ~ ±1000	1.8K // 5.0	49T	
	10M7.5B	4	3	± 3.75	40	± 14	1.0	2.5	65	±300 ~ ±1000	1.8K // 4.5	49T a pair	
	10M7.5C	6	3	± 3.75	45	± 8.75	2.0	3.5	65	±12.5 ~ ±300	1.8K // 3.5	49T 3 pcs	L1
	10M7.5D	8	3	± 3.75	65	± 8.75	2.0	4.0	90	±12.5 ~ ±300	1.8K // 3.5	49T 4 pcs	L2
20.0	10M12A	2	3	± 6.0	18	± 25	0.5	2.0	35	±300 ~ ±1000	2.5K // 2.5	49T	
	10M12B	4	3	± 6.0	40	± 20	1.0	2.5	65	±300 ~ ±1000	2.5K // 1.5	49T a pair	
	10M12C	6	3	± 6.0	45	± 15	2.0	4.0	65	±20 ~ ±300	2.5K // 1.5	49T 3 pcs	L1
	10M12D	8	3	± 6.0	65	± 15	2.0	2.0	90	±20 ~ ±300	2.5K // 1.5	49T 4 pcs	L2
25.0	10M15A	2	3	± 7.5	18	± 25	0.5	1.5	35	±300 ~ ±1000	3.0K // 2.0	49T	
	10M15B	4	3	± 7.5	40	± 25	1.0	2.5	55	±300 ~ ±1000	3.0K // 1.5	49T a pair	
	10M15C	6	3	± 7.5	45	± 18	2.0	3.0	65	±25 ~ ±300	3.3K // 1.5	49T 3 pcs	L1
	10M15D	8	3	± 7.5	65	± 18	2.0	4.0	90	±25 ~ ±300	3.3K // 1.5	49T 4 pcs	L2
50.0	10M30A	2	3	± 15	15	± 50	0.5	1.5	30	±300 ~ ±1000	5.0K // 0	49T	
	10M30B	4	3	± 15	30	± 40	1.0	2.5	30	±300 ~ ±1000	5.5K // -1.0	49T a pair	
	10M30C	6	3	± 15	60	± 45	2.0	3.0	65	±45 ~ ±300	5.5K // -1.0	49T 3 pcs	L1
	10M30D	8	3	± 15	60	± 30	2.0	3.5	90	±50 ~ ±300	5.5K // -1.0	49T 4 pcs	L2

Part Number Format and Example

49T	49TMJ									
4 pole M.C.F. (Paired packages , Tandem set)	(L - 1) , (L - 2) , (L - 3) --- One Package Type									
<p>Color dots for pair orientation match</p> <p>User to provide Cc</p>	<table border="1"> <thead> <tr> <th></th> <th>L</th> <th>P</th> </tr> </thead> <tbody> <tr> <td>L-1</td> <td>15.0</td> <td>9.0</td> </tr> <tr> <td>L-2</td> <td>18.5</td> <td>13.4</td> </tr> </tbody> </table>		L	P	L-1	15.0	9.0	L-2	18.5	13.4
	L	P								
L-1	15.0	9.0								
L-2	18.5	13.4								

M. C. F. [Monolithic Crystal Filters]

Part Number Format and Example

SMD Type Part Number Format			
[1]	[2]	[3]	[4]
Frequency Code	MQ	Width Code	Poles Code

Examples	45	MQ	30	A
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Dip Type Part Number Format					
[1]	[2]	[3]	[4]	[5]	[6]
Frequency Code	M	Width Code	Poles Code	Holder Type	G

Examples	21.7	M	7.5	D	U5SM	G
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[1]	Freq. code : " 10 " for 10.700MHz , " 21 " for 21.400MHz , " 21.7 " for 21.700MHz , " 45 " for 45.000MHz , Freq. code : If none standard freq. please show frequency with one decimal point .
[2]	" M " Dip Type series , " MQ " SMD Type (7.0 * 5.0 * 1.3 mm)
[3]	Pass band width (3dB) (min.) " 7.5 " for ± 3.75 kHz , " 15 " for ± 7.5 kHz , " 20 " for ± 10 kHz , " 30 " for ± 15 kHz ,
[4]	No. of poles " A " for 2 poles , " B " for 4 poles , " C " for 6 poles , " D " for 8 poles
[5]	Dip type holder type
[6]	Please add " G " after the " type code " for RoHS compliant (Does not apply to MQ series) .
[7]	Standard operating temperature range is -20°C to 70°C , If non-standard please enter the desired temp. range after " / " , for example " / -30+70 " : -30°C to 70°C

Package Dimensions (unit : mm)

[U 1]	[U 5]									
[U 1 M J]	[U 5 M J]									
4 pole M.C.F. (paired packages)	[S - 1] , [S - 2]									
	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td></td> <td>L</td> <td>P</td> </tr> <tr> <td>S-1</td> <td>11.0</td> <td>7.4</td> </tr> <tr> <td>S-2</td> <td>13.4</td> <td>9.8</td> </tr> </table>		L	P	S-1	11.0	7.4	S-2	13.4	9.8
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S-1	11.0	7.4								
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Mercury Green Program

Common points for all crystal products

Mercury Green Program

Mercury's Green Program is implemented in accordance with the European Union's directive on "Restriction of the use of certain Hazardous Substance(RoHS)". Mercury's Lead-Free and RoHS Compliant products follow the EU directive (2002/95/EC) and include test reports issued by SGS Group on hazardous substances levels for the six substances: lead(pb), cadmium(cd), mercury (Hg), hexavalent chromium(Cr+6), polybrominated biphenyl(PBB), and polybrominated diphenyl ether (PBDE).

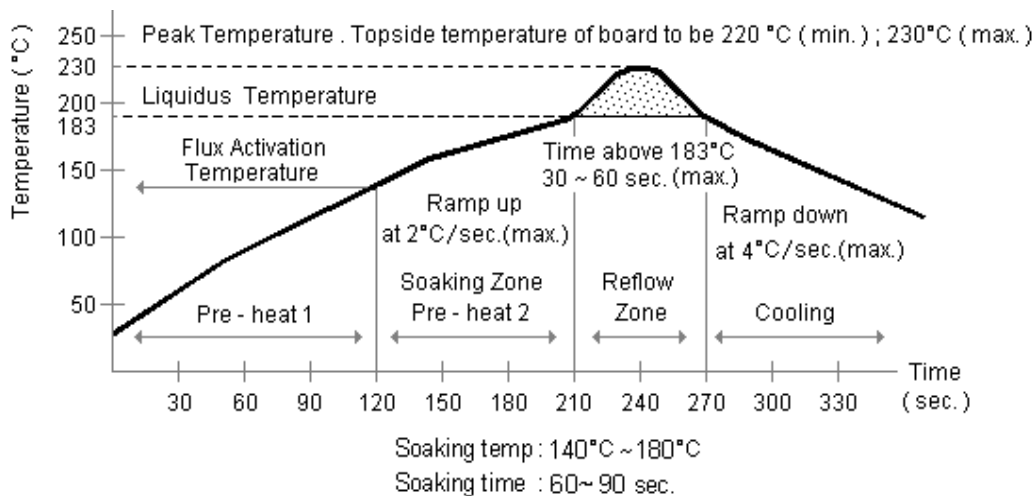
- Crystal Green Program-Crystals
- Crystal Oscillator Green Program-XO、VCXO、VCTCXO、TCXO、OCXO
- Crystal Filter Green Program-Filters

Soldering conditions

- (1) Lead wires should be soldered within 3 seconds with the iron heated to a temperature of 380°C (max.).
- (2) In solder-dip mounting , it should be within 10 seconds with a temperature of 260°C (max.).
Heating the whole crystal unit in the dip mounting process should be avoided .
Upright mounting is recommended (to prevent applying heat directly to the body of a crystal unit) .
- (3) Heating the whole body of the crystal unit , for example , in a reflow oven may affect the performance.
The holder is small and is sealed by solder material by press sealing , so that such a reflow process is not allowed to be applied .

Suggested Reflow Profile [SMD type products]

(1) Low temperature solder reflow : For Sn62 , Pb36 , Ag2 , Sn63 , Pb37 alloy .



(2) High temperature solder reflow : For Sn96.5% , Ag3.5% , Cu0.5% alloy .

