

**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	<b>10M7.5A</b>	2	3	± 3.75	20	± 18	0.5	1.5	35	±300 ~ ±1000
	<b>10M7.5B</b>	4	3	± 3.75	40	± 14	1.0	2.5	65	±300 ~ ±1000	1.8K // 4.5	49T a pair	
	<b>10M7.5C</b>	6	3	± 3.75	45	± 8.75	2.0	3.5	65	±12.5 ~ ±300	1.8K // 3.5	49T 3 pcs	L1
	<b>10M7.5D</b>	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	<b>10M12A</b>	2	3	± 6.0	18	± 25	0.5	2.0	35	±300 ~ ±1000	2.5K // 2.5	49T	
	<b>10M12B</b>	4	3	± 6.0	40	± 20	1.0	2.5	65	±300 ~ ±1000	2.5K // 1.5	49T a pair	
	<b>10M12C</b>	6	3	± 6.0	45	± 15	2.0	4.0	65	±20 ~ ±300	2.5K // 1.5	49T 3 pcs	L1
	<b>10M12D</b>	8	3	± 6.0	65	± 15	2.0	2.0	90	±20 ~ ±300	2.5K // 1.5	49T 4 pcs	L2
25.0	<b>10M15A</b>	2	3	± 7.5	18	± 25	0.5	1.5	35	±300 ~ ±1000	3.0K // 2.0	49T	
	<b>10M15B</b>	4	3	± 7.5	40	± 25	1.0	2.5	55	±300 ~ ±1000	3.0K // 1.5	49T a pair	
	<b>10M15C</b>	6	3	± 7.5	45	± 18	2.0	3.0	65	±25 ~ ±300	3.3K // 1.5	49T 3 pcs	L1
	<b>10M15D</b>	8	3	± 7.5	65	± 18	2.0	4.0	90	±25 ~ ±300	3.3K // 1.5	49T 4 pcs	L2
50.0	<b>10M30A</b>	2	3	± 15	15	± 50	0.5	1.5	30	±300 ~ ±1000	5.0K // 0	49T	
	<b>10M30B</b>	4	3	± 15	30	± 40	1.0	2.5	30	±300 ~ ±1000	5.5K // -1.0	49T a pair	
	<b>10M30C</b>	6	3	± 15	60	± 45	2.0	3.0	65	±45 ~ ±300	5.5K // -1.0	49T 3 pcs	L1
	<b>10M30D</b>	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>	<p>Pin 1 : Output Pin 2 : Ground Pin 3 : Ground Pin 4 : Input</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								

Mercury [www.mercury-crystal.com](http://www.mercury-crystal.com)

## Part Number Format and Example

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

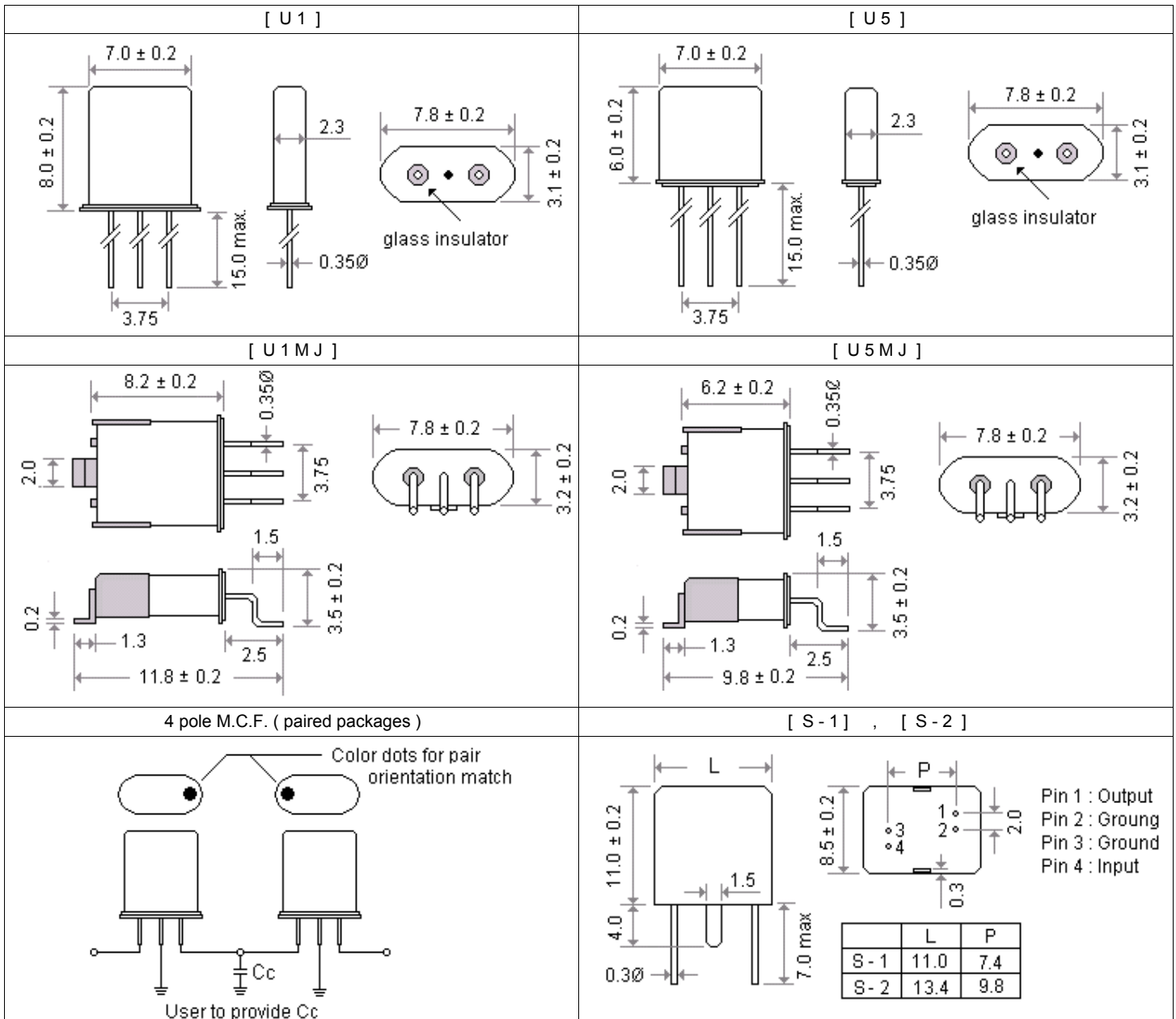
Examples	45	MQ	30	A
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Dip Type Part Number Format					
[1]	[2]	[3]	[4]	[5]	[6]
Frequency Code	M	Width Code	Poles Code	Holder Type	G

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 $\pm 3.75\text{kHz}$ , "15" for $\pm 7.5\text{kHz}$ , "20" for $\pm 10\text{kHz}$ , "30" for $\pm 15\text{kHz}$ ,
[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 $-20^{\circ}\text{C}$ to $70^{\circ}\text{C}$ , If non-standard please enter the desired temp. range after "/" , for example "/-30+70" : $-30^{\circ}\text{C}$ to $70^{\circ}\text{C}$

## Package Dimensions ( unit : mm )



# 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



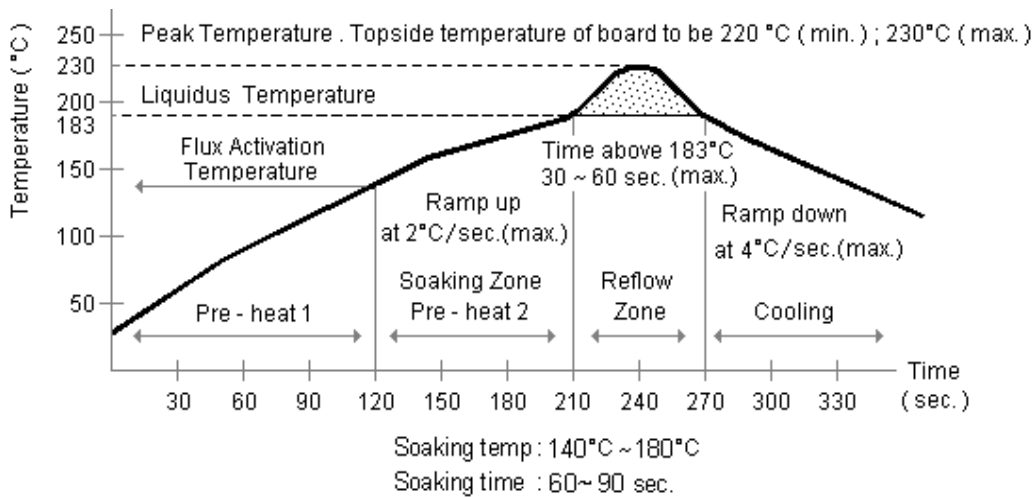
**RoHS Compliant Product  
by Mercury**

### 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 .

