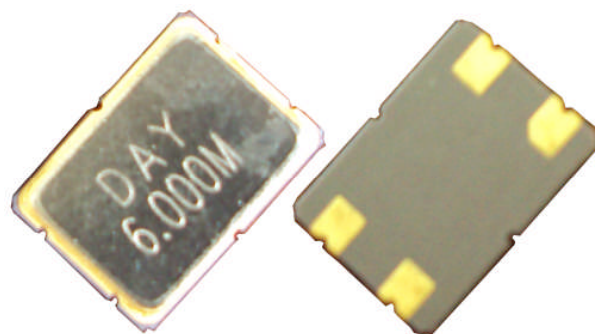


Quartz Crystal Series

7050B

Features

- ◆ RoHS Compliant
- ◆ Ceramic/metal package



Electrical Specifications

Item	Specifications	Remarks
Nominal Frequency Range	6.000MHz to 48.000MHz	Fund.; AT-Cut
	40.000MHz to 133.000MHz	3 rd O.T.; AT-Cut
Frequency Tolerance	±20ppm(Standard) at 25℃±3℃	Others are offered
Load Capacitance	Fund.:10pF to ∞, O.T.:5pF to ∞	Please specify
Series Resistance	As ESR table	
Shunt Capacitance	7pF Max	
Drive Level	10μW to 100μW	1000μW Max
Operating Temperature	-20℃ to +70℃ (Standard)	Others are offered
Storage Temperature	-55℃ to +125℃	
Stability vs. Temperature	±20ppm(Standard)	Others are offered
Insulated Resistance	500MΩ	Minimum
Aging	±2ppm/year	Maximum

ESR(Series Resistance)

Frequency(MHz)	Mode	Ohm Max	Frequency(MHz)	Mode	Ohm Max
6.0~15.9	Fund.;AT	60	40.0~79.9	3 rd O.T.;AT	80
16.0~48.0	Fund.;AT	40	80.0~133.0	3 rd O.T.;AT	60

Stability vs. Temperature

◆ Standard		1	2	3	5	6	7	Remarks
◇ Please specify		±10ppm	±20ppm	±30ppm	±50ppm	±15ppm	±25ppm	
B	-10℃ to +60℃	◇				◇		
C	-20℃ to +70℃	◇	◆	◇	◇	◇	◇	Standard
D	-40℃ to +85℃		◇	◇	◆	◇	◇	

Ordering Information

Q	R	Type	Pin	XX.XXXX	M	Mode	CL pF	Freq.Tolerance at 25℃	Operating Temp.	Stability Vs. Temp.	Option
---	---	------	-----	---------	---	------	----------	--------------------------	--------------------	------------------------	--------

Q: Quartz 75: 7.0*5.0mm B:4 Center frequency M: F:Fund.;AT See ±10ppm to 50ppm See Table See Table F:Lead Free
R:Resonator 7.0*5.0mm 6.0 to 133.0MHz MHz O: 3rd O.T.;AT Table

Example:QR75B13.5600MFT1C1F

(Crystal, SMD7.0*5.0mm, 13.5600MHz, 4pins, 12pF, +/-10ppm, -20 to +70deg, +/-10ppm. T&R, Lead free)

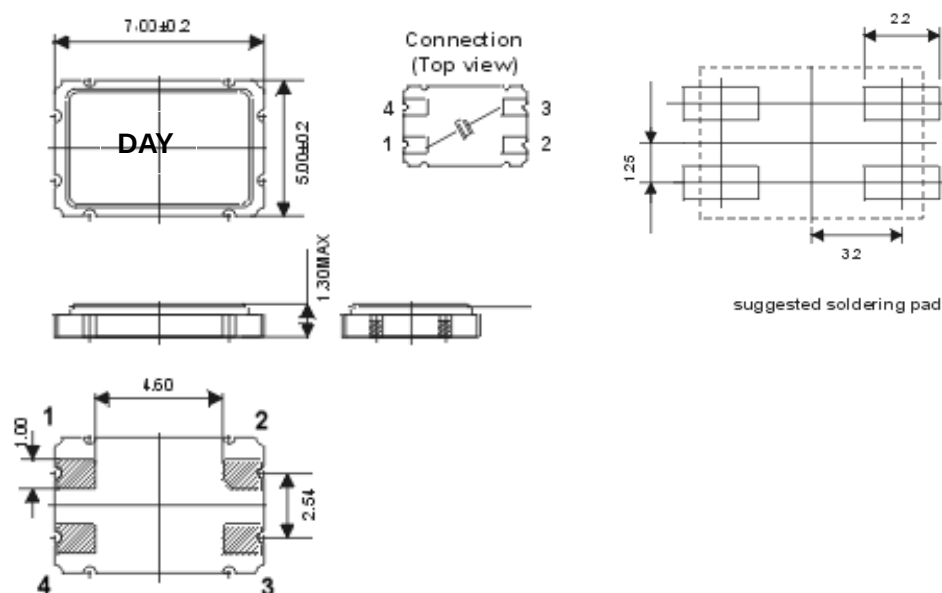
Quartz Crystal Series

7050B

Load Capacitance Codes

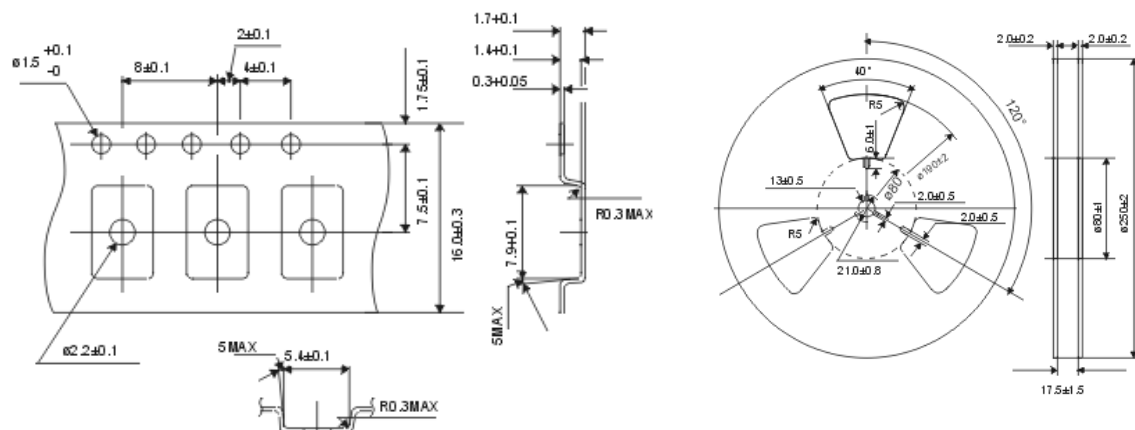
7pF:	E	8pF:	F	9pF:	B	10pF:	R
12pF:	T	15pF:	H	16pF:	I	18pF:	J
20pF:	K	22pF:	L	25pF:	G	27pF:	M
30pF:	N	32pF:	P	33pF:	W	Series:	S

Dimensions



Unit:mm

Taping Specification



1000pcs/Reel

Quartz Crystal Series

7050B

Reflow Soldering Profile

