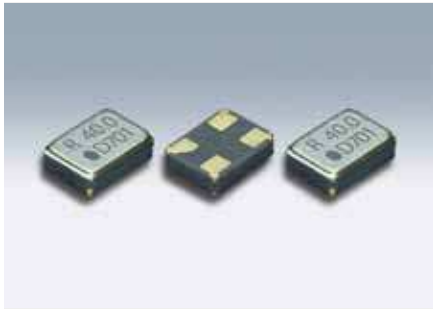


SMD Crystal Oscillators

DSO1612AR



Actual size DSO1612AR □

■ Features

- 1612 size, 0.5 mm high. Ultra miniature and lightweight SMD SPXO
- 3-state function
- AEC-Q100 compliant
- Supply Voltage : 1.8V/2.5V/2.8V/3.3V
- Available frequency range : 0.584375~80MHz
- Available up to 80MHz by using AT cut fundamental resonator. Low jitter provides for high performance.



■ Applications

- PC, PDA, PND, DSC, DVD, DVC, HDD Smartphone, WiLAN, WiMAX, Bluetooth
- PC peripherals, gaming equipment
- Automotive multimedia device

[Function Code]
DSO1612AR

Function Code	Supply Voltage	Frequency Tolerance
A	:3.3V	A:±100×10 ⁻⁶
M	:3.0V	B:±50×10 ⁻⁶
B	:2.8V	C:±30×10 ⁻⁶
C	:2.5V	D:±25×10 ⁻⁶
D	:1.8V	E:±20×10 ⁻⁶

■ Standard Specification

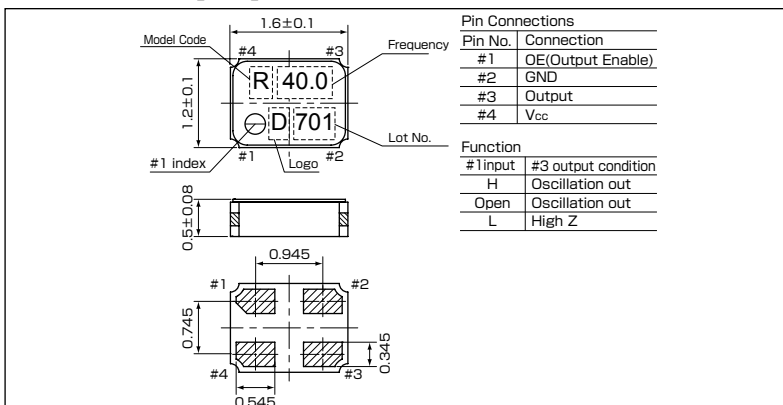
When requesting the product, please select the model and function code of your request.

Item	Function Code		Output Frequency Range (MHz)	Legend	Spec.			Unit	Condition	
	Supply Voltage	Frequency tolerance			min.	Typ.	max.			
Supply Voltage	A	*	0.584375≤fo<80	Vcc	+3.0	+3.3	+3.6	V		
	M	*			+2.7	+3.0	+3.3			
	B	*			+2.6	+2.8	+3.0			
	C	*			+2.25	+2.5	+2.75			
	D	*			+1.6	+1.8	+2.0			
Frequency Tolerance (includes frequency tolerance at room temperature)	*	A	0.584375≤fo<80	f_tol	-100	-	+100	×10 ⁻⁶	-40~+85°C	-10~+70°C (Standard Operating Temperature Range)
		B			-50	-	+50			
		C			-30	-	+30			
		D			-25	-	+25			
		E			-20	-	+20			
Current Consumption	A,M	*	0.584375≤fo<40	Icc			3.0	mA	No Load	
			40≤fo<60				3.4			
			60≤fo≤80				3.8			
	B		0.584375≤fo<40				2.4			
			40≤fo<60				2.8			
			60≤fo≤80				3.1			
	C		0.584375≤fo<40				2.0			
			40≤fo<60				2.4			
			60≤fo≤80				2.7			
	D		0.584375≤fo<40				1.4			
			40≤fo<60				1.6			
			60≤fo≤80				1.9			
Stand-by Current(#1 pin "L" Level)	*	*	*	I_std	-	-	10	μA	-40~+85°C	
Load Condition	*	*	0.584375≤fo<80	L_cmos	-	-	15	pF		
Symmetry	*	*	0.584375≤fo<80	SYM	45	50	55	%	at 50% Vcc	
0 Level Input Voltage	*	*	*	VOL	-	-	Vccx0.1	V		
1 Level Input Voltage	*	*	*	VOH	Vccx0.9	-	-	V		
Rise and Fall Time	A,M,B,C	*	0.584375≤fo<80	tr, tf	-	-	3.5	ns	10~90% Vcc Level	
OE Pin 0 Level Input Voltage	*	*	*	VIL	-	-	Vccx0.2	V		
OE Pin 1 Level Input Voltage	*	*	*	VIH	Vccx0.8	-	-	V		
Output Disable Time	*	*	*	tPLZ	-	-	200	ns		
Output Enable Time	*	*	*	tPZL	-	-	1	ms		
Period Jitter (1)	*	*	*	tRMS	-	2.2	-	ps	σ	
	*	*	*	tp-p	-	20	-	ps	Peak to peak	
Total Jitter (1)	*	*	*	tTL	-	31	-	ps	1DJ+n*IRJ n=14.1 (BER=1*10 ⁻¹²) (2)	
Phase Jitter	*	*	40≤fo≤80	tpj	-	-	1	ps	fo offset12kHz~20MHz	
	*	*	10≤fo<40		-	-	1	ps	fo offset12kHz~5MHz	
Packing Unit	2000pcs./reel (φ 180)									

- (1) Measured WAVECREST DTS-2075
(2) tDJ:Deterministic jitter tRJ:Random jitter

Consult our sales representative for other specifications.

■ Dimensions[mm]



■ Recommended Land Pattern [mm]

