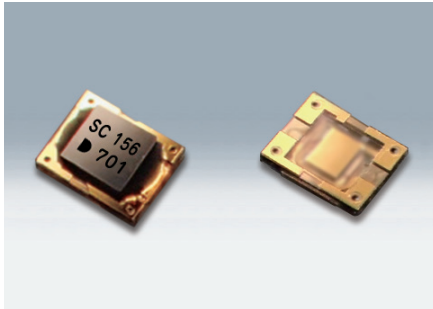


SMD Differential Output Crystal Oscillators

DS1008JC/DS1008JK/DS1008JJ



Actual size ◻

■ Features

- 1008 size, height 0.24mm
Unprecedented extremely low-profile package using a novel structure
- Available frequency range : 156.25MHz
- HD-LVDS output (DS1008JC)
- LV-PECL out put (DS1008JK)
- LVDS output (DS1008JJ)
- By using AT cut fundamental resonator, low jitter provides for high performance.



■ Applications

- Optical transmission device

■ Standard Specification

Item	Type	Legend	DS1008JC	DS1008JK	DS1008JJ	Condition
Output Specification	—		HD-LVDS	LV-PECL	LVDS	
Output Frequency Range	f _o		156.25MHz			
Supply Voltage	V _{cc}		+3.3V±0.165V		+2.5V±0.125V / +3.3V±0.165V	
Frequency Tolerance (Includes frequency tolerance at room temperature.)	f _{tol}		±100×10 ⁻⁶ max.			-40 to +85°C
Current Consumption	I _{cc}		35mA max.	57mA max.	26mA max.	
Load Condition	Load-R		100Ω (Output-OutputN, DC Cut)	50Ω to V _{cc} -2.0V	100Ω (Output-OutputN)	
Symmetry	SYM		45 to 55%			at outputs cross point
0 Level Output Voltage	V _{OL}		—	V _{cc} -1.81 to V _{cc} -1.62	—	
1 Level Output Voltage	V _{OH}		—	V _{cc} -1.025 to V _{cc} -0.88	—	
Rise and Fall Time	t _r , t _f		0.4ns max	0.5ns max	0.4ns max	20 to 80% Output-OutputN
Differential Output Voltage	V _{OD1} , V _{OD2}		0.500 to 1.000V	—	0.247 to 0.454V	
Change to V _{OD}	ΔV _{OD}		—	—	50mV	ΔV _{OD} =ABS(V _{OD1} -V _{OD2})
Offset Voltage	V _{OS}		—	—	1.125 to 1.375V	Output, OutputN Offset Voltage
Offset to V _{OS}	ΔV _{OS}		—	—	50mV	Magnitude Change V _{OS}
Start Up Time	T _{st}		2ms			
Period Jitter (1)	t _{RMS}		2.5ps typ.			
	t _{p-p}		22ps typ.			Peak to peak
Phase Jitter (2)	t _{pj}		0.1ps max.		0.12ps max.	f _o offset: 12kHz to 20MHz @ +25°C
Packing Unit (3)			3000pcs./reel (φ180)			

(1) Measured WAVECREST DTS-2075

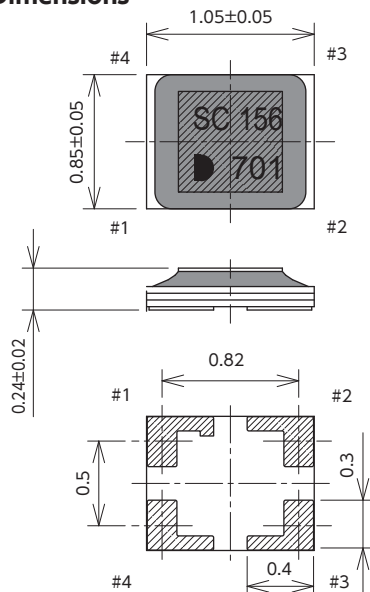
(2) Measured Keysight Technologies E5052B

(3) Moisture prevention packing

Consult our sales representative for other specifications

[mm]

■ Dimensions



Pin Connection

Pin No.	Connection
#1	GND
#2	OutputN
#3	Output
#4	V _{cc}

■ Recommended Land Pattern

〈Top View〉

