LVDS TYPE
SLO-02

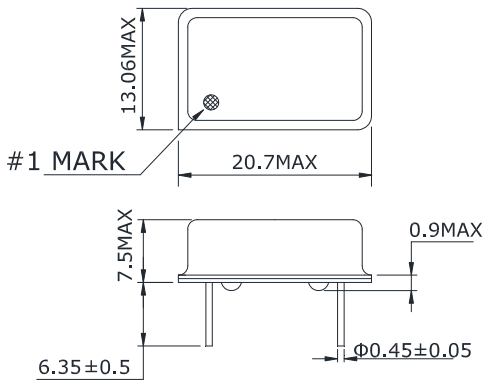
- Metal Package
- Low RMS phase jitter(12 kHz to 20 MHz)
- 2.5 V, 3.3 V Supply Voltage
- LVDS Output

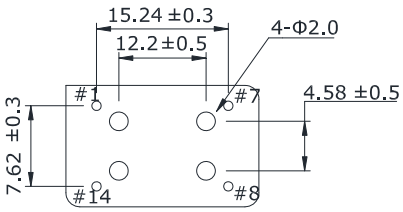


■ ELECTRICAL SPECIFICATIONS

ITEM	Value	Remarks
Output Logic Type	LVDS	LVDS XO
Frequency Range	9.5000 MHz to 250.000 MHz	
Supply Voltage(V_{DD})	2.5 V_{DC} ±5 %, 3.3 V_{DC} ±5 %	
Operating Temperature Range	-20 to +70 ℃, -40 to +85 ℃	
Storage Temperature Range	-55 to +125 ℃	
Frequency Stability	±25 ppm, ±50 ppm Max.	Over operating Temperature range
Input Current	45 mA Typ., 65 mA Max.	
Output Voltage Logic High(V_{OH})	1.43 V Typ., 1.60 V Max.	
Output Voltage Logic Low(V_{OL})	1.10 V Typ., 0.90 V Min.	
Differential Output Voltage(V_{OD})	247 mV Min., 330 mV Typ., 454 mV Max.	
Offset Voltage(V_{OS})	1.125 V Min., 1.250 V Typ., 1.375 V Max.	
Rise / Fall Time	0.3 ns Typ., 0.7 ns Max.	Measured over 20 % to 80 % of waveform
Duty Cycle	45 to 55 %, 40 to 60 %	Measured at 50 % of waveform
Start-up Time	10 ms Max.	
Output Load Condition(LVDS)	100 Ω	Between Output and Complementary Output
Output Enable Function (V_{IH} and V_{IL})	70 % of V_{DD} min. to Enable Output 30 % of V_{DD} max. to Disable Output	High Impedance
RMS Phase Jitter	1 ps Max.	BW : 12 kHz to 20 MHz
Frequency Aging	±3 ppm Max.	25 ℃, First year

■ MECHANICAL DIMENSIONS (mm)





CONNECTION
#1 : OUTPUT($\overline{Q}$)
#7 : GND
#8 : OUTPUT(Q)
#14 : V_{DD}

■ PART NUMBERING GUIDE

SLO – 02 33 50 A D S R – 156.250M

SUPPLY VOLTAGE(V_{DD})
33 : 3.3 V, 25 : 2.5 V

FREQUENCY STABILITY
25 : ±25 ppm, 50 : ±50 ppm
BLANK : ±100 ppm

OPERATING TEMPERATURE RANGE
A : -40 to 85 ℃, B : -20 to 70 ℃
BLANK : 0 to 70 ℃

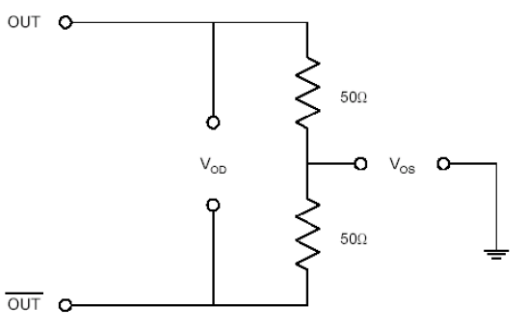
DUTY CYCLE
D : 45/55, E : 40/60

FREQUENCY
M : MHz

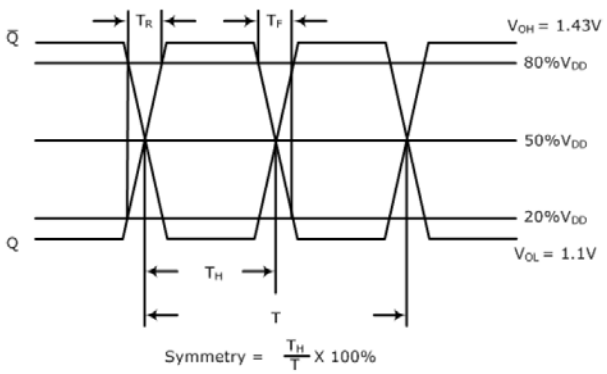
PACKAGE OPTION
R : TAPE AND REEL
BLANK : BULK

PIN 1 CONNECTION
S : TRI-STATE, E/D
BLANK : NO CONNECTION

■ TEST CIRCUIT (LVDS)



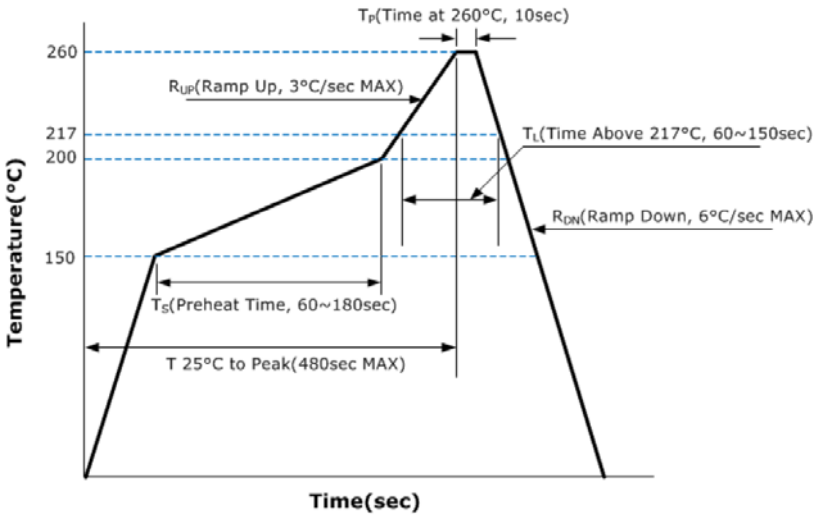
■ WAVEFORM (LVDS)



■ ENVIRONMENTAL & MECHANICAL SPECIFICATIONS

Temperature Cycling	MIL-STD-883, Method 1010, Condition B
Fine Leak Test	MIL-STD-883, Method 1014, Condition A
Gross Leak Test	MIL-STD-883, Method 1014, Condition C
Mechanical Shock	MIL-STD-202, Method 213, Condition C
Vibration	MIL-STD-883, Method 2007, Condition A
Moisture Resistance	MIL-STD-883, Method 1004
Moisture Sensitivity	J-STD-020, MSL 1
Resistance to Soldering Heat	MIL-STD-202, Method 210, Condition K
Solderability	MIL-STD-883, Method 2003

■ REFLOW PROFILE



■ MARKING GUIDE

Frequency

Model Name

LINE 1 : SUNNY

LINE 2 : SLO-023

LINE 2 : XX.XXXMHz

LINE 3 : ●YY MM

Year

Month