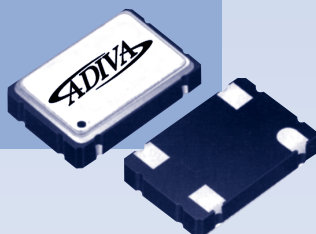


Crystal Clock

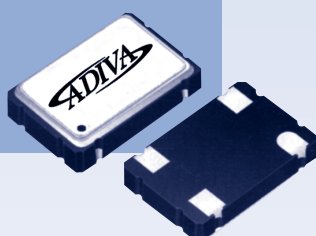
Surface Mount

ADOSM-580 Series (581, 582, 583, 584)

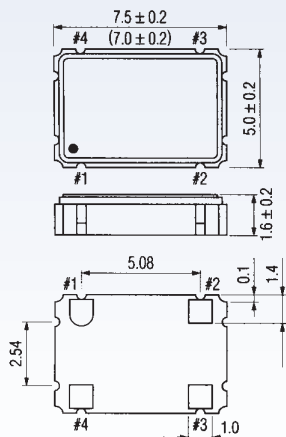
ADOSM-581 & ADOSM-582



ADOSM-583 & ADOSM-584



ADOSM-581, ADOSM-582
ADOSM-583 & ADOSM-584 (unit: mm)



OSC WITHOUT TRI-STATE

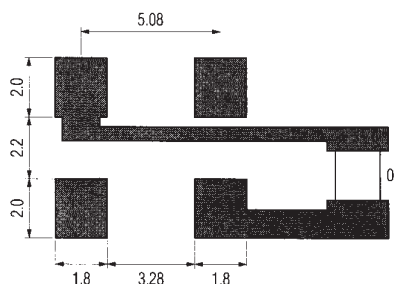
PIN	CONNECTION
1	N.C.
2	GND
3	OUTPUT
4	Vcc

OSC WITH TRI-STATE

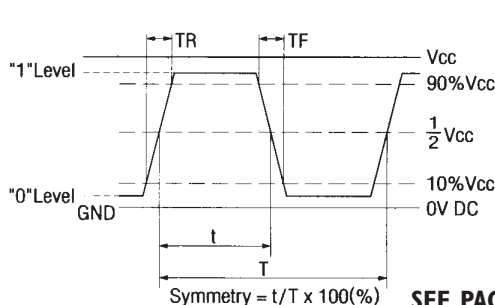
PIN	CONNECTION
1	"L" : "H" or OPEN
2	GND
3	Z : OUTPUT
4	Vcc

Z : high impedance

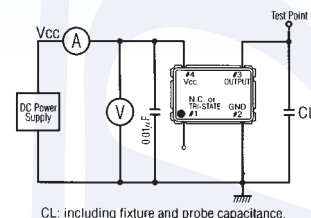
SOLDERING PATTERN



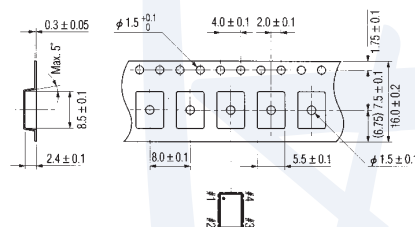
OUTPUT WAVEFORM



TEST CIRCUIT



TAPE SPECIFICATIONS



1000pcs. per reel (180mm dia.)

STANDARD SPECIFICATIONS

Package Type.	ADOSM-581		ADOSM-582		ADOSM-583		ADOSM-584	
Frequency Range	1.800 MHz to 100.000 MHz		1.800 MHz to 100.000 MHz		1.800 MHz to 70.000 MHz		1.800 MHz to 70.000 MHz	
Frequency Stability	±100 ppm		±100 ppm		±100 ppm		±100 ppm	
	±50 ppm		±50 ppm		±50 ppm		±50 ppm	
	±30 ppm		±30 ppm		±30 ppm		±30 ppm	
over all conditions		over all conditions		over all conditions		over all conditions		
Operating Conditions	-10°C to +70°C		-10°C to +70°C		-10°C to +70°C		-10°C to +70°C	
Operating temperature	-55°C to +125°C		-55°C to +125°C		-55°C to +125°C		-55°C to +125°C	
Storage temperature	+5V DC ±10%		+5V DC ±10%		+5V DC ±10%		+5V DC ±10%	
Input voltage (Vcc)	NO TRI-STATE		Pin#1 = Open → #3=Output Pin#1 = +2.2V min. → #3=Output Pin#1 = +0.8V max. → #3=High		NO TRI-STATE		Pin#1 = Open → #3=Output Pin#1 = +2.2V min. → #3=Output Pin#1 = +0.8V max. → #3=High	
Tri-state control voltage	20 mA max. (1.800 MHz to 36.000 MHz)		30 mA max. (1.800 MHz to 36.000 MHz)		30 mA max. (1.800 MHz to 36.000 MHz)		30 mA max. (1.800 MHz to 36.000 MHz)	
Input Current	55 mA max. (36.000 MHz to 70.000 MHz)		65 mA max. (36.000 MHz to 70.000 MHz)		65 mA max. (36.000 MHz to 70.000 MHz)		65 mA max. (36.000 MHz to 70.000 MHz)	
Output (-10°C to +70°C)	50% ±10% at 50%Vc		50% ±5% at 50%Vc		c50% ±10% at 50%Vc		50% ±5% at 50%Vc	
Symmetry	15 ns max. (1.800 MHz to 70.000 MHz)		5 ns max. (70.000 MHz to 100.000 MHz)		7 ns max.		7 ns max.	
Rise and fall times	10% Vcc max.		10% Vcc max.		10% Vcc max.		10% Vcc max.	
"0" Level	90% Vcc min.		90% Vcc min.		90% Vcc min.		90% Vcc min.	
"1" Level	30 pF max.		30 pF max.		50 pF max.		50 pF max.	
Load	5 ms (1.800 MHz to 36.000 MHz)		5 ms (1.800 MHz to 36.000 MHz)		5 ms (1.800 MHz to 36.000 MHz)		5 ms (1.800 MHz to 36.000 MHz)	
Start-up Time (max.)	10 ms (36.000 MHz to 70.000 MHz)		10 ms (36.000 MHz to 70.000 MHz)		10 ms (36.000 MHz to 70.000 MHz)		10 ms (36.000 MHz to 70.000 MHz)	
Enable/Disable Phase	15 ms (70.000 MHz to 100.000 MHz)		15 ms (70.000 MHz to 100.000 MHz)		15 ms (70.000 MHz to 100.000 MHz)		15 ms (70.000 MHz to 100.000 MHz)	
	NO TRI-STATE		100 ns max.		NO TRI-STATE		100 ns max.	
	4 mA min. ("0" level)		4 mA min. ("1" level)		16 mA min. ("0" level)		16 mA min. ("1" level)	
Delay Time	4 mA min. ("0" level)		4 mA min. ("1" level)		16 mA min. ("0" level)		16 mA min. ("1" level)	
Output Current	+240°C ±5°C for 10 seconds				+150°C ±10°C for 1 to 2 minutes (preheating)			
Reflow Soldering Conditions								

PACKAGE DATA

Item / Package	ADOSM-581, 582, 583, 584
LID	Metal
BASE	Ceramic
SEALING	Glass-frit
TERMINAL PLATING	Gold

Crystal Clock

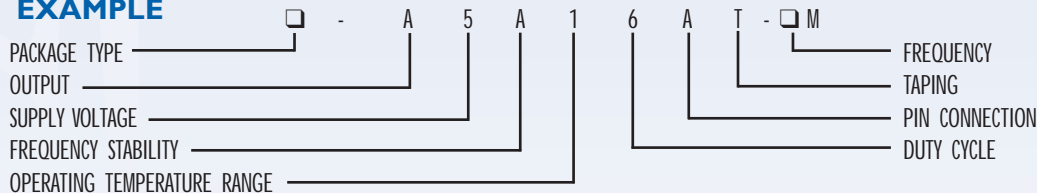
Surface Mount

ADOSM Series



Package Type	ADOSM-351 pg41 ADOSM-352 pg41 ADOSM-361 pg42	ADOSM-471 pg43 ADOSM-576 pg44 ADOSM-581 pg45	ADOSM-582 pg45 ADOSM-583 pg45 ADOSM-584 pg45	ADOSM-1014C pg46 ADOSMPP1 NEW
Output	CMOS	A TTL	B CMOS Compatible	C
Supply Voltage	3.3V	3 5.0V	5	
Frequency Stability Over Temperature	±100 ppm ±50 ppm	A ±30 ppm B ±25 ppm	C ±10 ppm D	E
Operating Temperature Range	0°C to +70°C -10°C to +60°C	1 -20°C to +70°C 2 -40°C to +85°C	3 -10°C to +70°C 4 0°C to +50°C	5 6
Duty Cycle	45/55%	5 40/60%	6	
PIN Connection	Tri-State, E//D	A No Connection		BLANK
Options	None (Standard)	Blank Tape & Reel	T	
Frequency	MHz	M KHz	K	

EXAMPLE



Crystal Clock

Thru Hole

ADOF Series

Package Type	ADOF (Full Size) pg47	ADOH (Half size) pg47
Output / Voltage	HCMOS/TTL/5V Blank TTL/5V T	HCMOS/5V H HCMOS/3.3V L TTL/3.3V TL HCMOS/3.3V HL
Frequency	MHz M	KHz K
Frequency Stability Over Temperature	±10 ppm 1 ±20 ppm 2	±25 ppm 3 ±50 ppm 5
Operating Temperature Range	0°C to +70°C A -10°C to +70°C B	-20°C to +70°C C -30°C to +70°C D
Duty Cycle	45/45% 5	40/60% 6 47.5-52.5% 7
Options	Tri-State T	Tri-State GULL WING TG GULL WING G

same part# guide for ADOFPP1 & ADOHPP1

EXAMPLE

