

Analog Oscilloscope

LOW-COST, 20MHz/40MHz/50MHz



TOS2000C SERIES



MODEL LIST

- TOS-2020BCH/2040BCH/2050BCH: SMT PCB, encoder switch
- TOS-2020CF/2040CF/2050CF: with built-in 6 digits frequency counter
- TOS-2020CT/2040CT/2050CT: with component test function

FEATURES

- Dual channel 20MHz/40MHz/50MHz
- 10 times sweep magnification
- TV synchronization; X-Y mode
- High illumination internal graticule CRT
- Fully sealed durable attenuation switch
- ALT triggering function, enabling simultaneous observation of two independent signals

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SPECIFICATIONS

Model		20MHz	40MHz	50MHz
Vertical system				
Sensitivity		5mV~5V/DIV±3%, 10 steps in 1-2-5 sequence		
Vernier sensitivity		≤1/2.5 of panel indicated value		
Bandwidth		DC (AC 10Hz)~20MHz	DC (AC 10Hz)~40MHz	DC (AC 10Hz)~50MHz
Rise time		Approx. 17.5ns	Approx. 8.75ns	Approx. 7ns
Input impedance		Approx. 1MΩ//Approx. 25pF		
Vertical mode		CH1, CH2, DUAL (ALT/CHOP), ADD, CH2 INV		
Chopping repetition frequency		Approx. 250kHz		
Input coupling		AC, GND, DC		
Max. Input voltage		400V peak-peak, AC frequency≤1kHz		
Common mode rejection ratio		>50:1 at 50kHz sine wave (set CH1 and CH2 at same sensitivity)		
Horizontal system				
Sweep time		0.2us~0.5s/DIV±3%, X10MAG: ±5% (20ns~50ns/DIV uncalibrated), 20 steps in 1-2-5 sequence		
Vernier sweep time control		≤1/2.5 of panel indicated value		
Sweep magnification		X10 (fastest sweep time 20ns/DIV)		
Linearity		±5%, X10MAG: ±10% (0.2s~1us)		
Trigger system				
Trigger mode		AUTO, NORM, TV-V, TV-H		
Trigger level lock		Not provided		
Trigger source		CH1, CH2, ALT, LINE, EXT		
Trigger coupling		AC: 20Hz to full bandwidth		
Trigger slope		"+" or "-"		
Sensitivity	Frequency	20Hz~2MHz	2MHz~20MHz	20MHz~40MHz
	CH1, CH2	1DIV	1.5DIV	2.5DIV
	ALT	2DIV	3DIV	
	EXT	200mV	800mV	
	TV	Sync pulse>1DIV (EXT: 1V)		
External trigger input				
Input impedance		Approx. 1MΩ//Approx. 25pF		
Max. input voltage		400V (DC+AC peak), AC frequency≤1kHz		
X-Y mode				
Sensitivity		5mV~5V/DIV±3%		
X-axis bandwidth		DC~500kHz (-3dB)		
Phase error		≤3° at DC~50kHz		
Calibration signal output		1kHz square wave; 2Vpp±2%; Output impedance: approx. 1kΩ		
Frequency counter (only for TOS-2020CF, TOS-2040CF, TOS-2050CF)				
Display		6 digits LED		
Accuracy		±0.01%		
Component test (only for TOS-2020CT, TOS-2040CT, TOS-2050CT)				
Testing subject		Resistor, Capacitor, Coil, Diode, Zener or simple combination of the components		
Testing voltage		Approx. 9Vac pp		
Testing frequency		50/60Hz		
Testing current		Approx. 0.6mA		
CRT				
Type		6-inch rectangular with internal graticule, 8x10DIV (1DIV=1cm)		
Phosphor		P31		
Accelerating voltage		Approx. 2kV (20MHz); Approx. 12kV (40MHz)		
Trace rotation		Adjustable at front panel		
General				
Power source		AC110V/220V±10%, 50/60Hz, Max. 35VA		
Accessories		Power cord x1, Operation manual x1, Probe x2		
Dimension (WxHxD)		310x150x455mm		
Weight		Approx. 8kg		