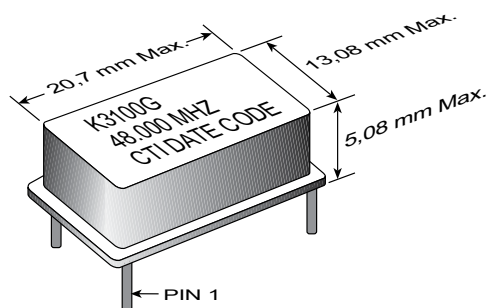


## K3100G Series

14 pin DIP, 5.0 Volt, Clock Oscillator

- ♦ TTL/CMOS Compatible  
Tight Symmetry (45/55%) Available
- ♦ Tri-State Option Available
- ♦ ±100ppm Stability Standard - K3100GC  
Tighter Stabilities Available  
±25ppm Stability:- K3100GA  
±50ppm Stability:- K3100GB
- ♦ Case Ground for EMI Protection

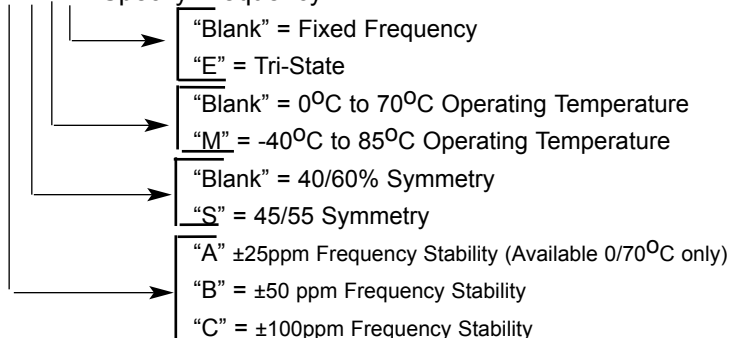


### ELECTRICAL SPECIFICATIONS

MODEL	K3100GA	K3100GB	K3100GC
Frequency Range (MHz)	1.0 to 125		
Frequency Stability (ppm)	Inclusive of calibration, temperature, voltage, load, shock, vibration, aging		
Overall	Inclusive of calibration, temperature, voltage, load, shock, vibration, aging		
0°C to 70°C	±25	±50	±100
-40°C to 85°C	N/A	±50	±100
Temperature Range (°C)	Inclusive of calibration, temperature, voltage, load, shock, vibration, aging		
Operating	-40°C to +85°C		
Storage	-55°C to +125°C		
Supply Voltage (V)	+3.3 ±5%		
Supply Current (mA)	<30		
Output CMOS			
"0" Level (V <sub>OL</sub> )	0.9 V <sub>CC</sub>		
"1" Level (V <sub>OH</sub> )	0.1 V <sub>CC</sub>		
Load	Up to 80MHz 50pF; >80MHz 30pF		
T <sub>R</sub> & T <sub>F</sub> (ns)	<10		
Symmetry (%)	40/60		
Jitter (Typical)	10ps RMS @ 100MHz		
Start up Time (ms)	<10		

### PART NUMBERING GUIDE

**K3100GXXXX** - Specify Frequency

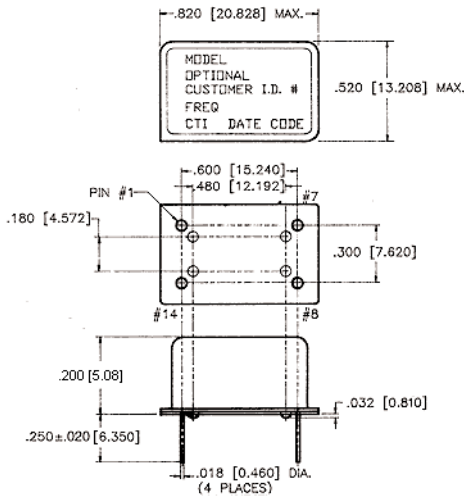


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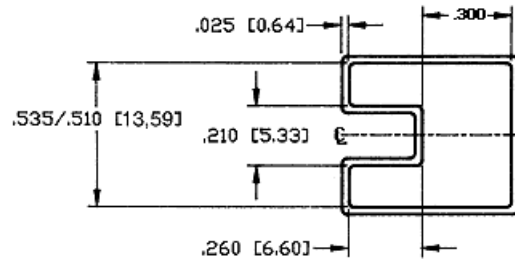
## K3100G Series

14 pin DIP, 5.0 Volt, Clock Oscillator



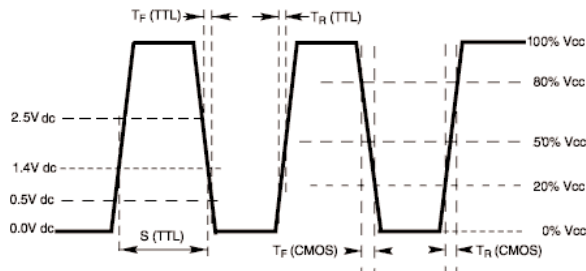
PIN	FUNCTION
1	N/C / Tri-State
7	Ground
8	Output
14	+ V <sub>CC</sub>

### SHIPPING TUBE CROSS SECTION

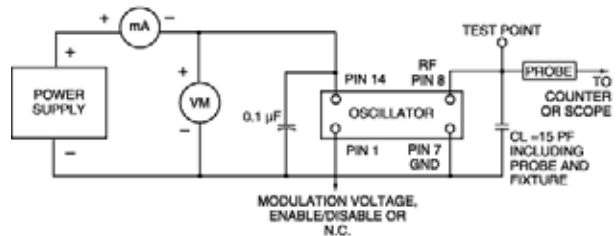


ALL DIMENSIONS ARE INSIDE

### OUTPUT WAVEFORM



### TEST CIRCUIT DIAGRAM



### MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS

TEST METHODS	REFERENCE PROCEDURES	DESCRIPTION
Temperature Cycle	MIL-STD-833, Mtd 1010, Cond. B	-55°C to +125°C; Air-to-Air; 100 cycles; 10 min. dwell
Mechanical Shock	MIL-STD-883, Mtd 2002, Cond. B	1500 g's
Vibration	MIL-STD 883, Mtd 2007, Cond. B	20-2000 Hz; 0.06 inch; 15g's; 3 planes
Humidity Steady State	MIL-STD-202, Mtd 103	40°C; 90%-95% R.H.; 56 days
Thermal Shock	MIL-STD-883, Mtd 1011.7 Cond. B	100°C to 0°C; Water-to-Water; 15 cycles
Electrostatic Discharge	MIL-STD-883, Mtd 3015 Class II	2 KV to 4 KV Threshold
Solderability	MIL-STD-883, Mtd 2022.2	Solder dip; Meniscograph Criteria
Hermeticity	MIL-STD-883, Mtd 1014.8, Cond. A1	Mass spectro. 2 x 10 <sup>-8</sup> atmos. CC/sec He
Resistance to Soldering	MIL-STD-202, Mtd 210D, Cond. J	235°C; 30 seconds
Lead Integrity	MIL-STD-883, Mtd 2004.5, Cond. A, B1	Lead tension & bend stress
Marking Permanence	MIL-STD-883, Mtd 2015.8	Resistance to solvents
Life Test	MIL-STD-883, Mtd 1005.6	125°C, powered, 1000 hours minimum

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