



The following section contains information about OFC Mini Ovens



SPECIFICATIONS

Operating Voltage: 10 to 28 Vdc (See Table 1, opposite)
Max. current at turn on: 496 mA
Set point: 50° C to 85° C (See Table 2, opposite)
Slope: ± 3° C over ambient temperature range
Ambient range: -30° C to 10° C below set point temperature
Power: 5.96 Watts max.
Warm-up: 4 minutes max.
Quiescent power @ 25° C: 1.3 Watts typical
Quiescent power @ -30° C: 2.2 Watts typical
Quiescent power with set point at max. ambient temperature: .30 Watts typical

MECHANICAL

Dimensions and configuration: See Figures 1 and 2
Terminal strength: Leads will withstand a 2 lb. pull
Weight (excluding component): 5 grams max.

SOLDERABILITY

Resistance to soldering: Will withstand immersion of leads in 350° C solder for 3.5 seconds
95% solder coating: 5 to 10 seconds immersion of leads in 260° C solder

ENVIRONMENTAL

Non-Operating Temperature: -64° C to 125° C
Altitude: Operating from sea level to 10,000 feet
Non-operating from sea level to 50,000 feet
Humidity: Will withstand 95% RH for a period of 1000 hours
Vibration: 10 to 55 CPS with double amplitude of .06 inch along each of 3 mutually perpendicular axes
Shock: 18 impact shocks of 20 g's (3 shocks in opposite directions along ea. of 3 mutually perpendicular axes); each shock 11 milliseconds ± 1 millisecond

MATERIAL

Case material: Base: Lexan
Cover: Lexan
Pins: .020 diameter Kovar
Leads: Kovar with a 60/40 solder electroplate over nickel barrier
Note: For best performance, crystal case should be coated with thermal compound.

ORDERING INFORMATION

Specify: Oven series (TO5M or HC43)
Operating voltage (oven #1 – 4)
Set point temperature (B – K)
Adjustable range (optional)

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Table 1 OPERATING VOLTAGES & POWER

Oven #	Volts DC	Max. Current	Max. Power	Slope
1	10	413 mA	4.13 W	± 3° C
	11	455 mA	5.00 W	± 3° C
	12	496 mA	5.95 W	± 3° C
2	15	333 mA	5.00 W	± 3° C
	18	249 mA	4.49 W	± 3° C
3	19	263 mA	5.00 W	± 3° C
	20	277 mA	5.54 W	± 3° C
	24	178 mA	4.26 W	± 3° C
4	26	192 mA	5.00 W	± 3° C
	28	207 mA	5.80 W	± 3° C

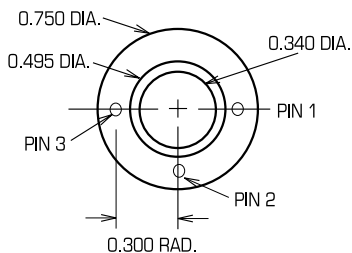
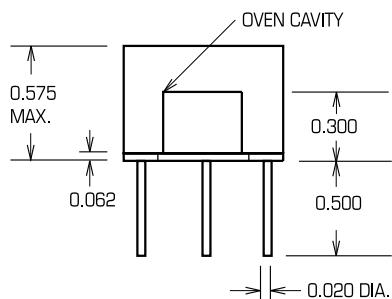
Table 2 SET POINT TEMPERATURE

Standard Temperatures with ±3 °C tolerance

B	C	D	E	F	G	H	K
50° C	55° C	60° C	65° C	70° C	75° C	80° C	85° C

Note: Adjustable to ±5° C for B, D, F and H

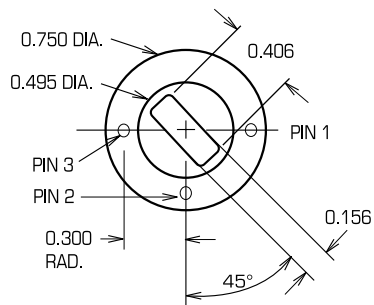
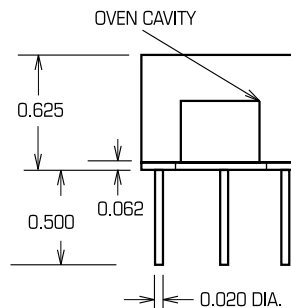
TO5M SERIES



PINS

- 1 – +VDC
 - 2 – N/C except for adjustable units
 - 3 – 0 VDC
- Note: Oven cavity accommodates a TO5 (HC35/U) crystal holder

HC43 SERIES



PINS

- 1 – +VDC
 - 2 – N/C except for adjustable units
 - 3 – 0 VDC
- Note: Oven cavity accommodates the following crystal holders: HC18/U, HC25/U, HC42/U, HC49/U

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SPECIFICATIONS

Set point temp. (see note)	Customer adjustable in range of 40° C to 90° C
Temperature stability	± 3° C over stated ambient range
Ambient range:	-55° C to 10° C below set point temperature
Warm-up (typical):	15 minutes to 1 hr from -55° C depending upon oven size
Operating voltage:	19 to 29 Vdc; lower voltages available by request
Power (Max. @ 24 Vdc; see note):	20 – 35 watts, depending upon oven size

ELECTRICAL CHARACTERISTICS

Oven control:	Proportional
Power consumption @ 25° C: (typical in still air)	2.5 watts* – 7.5 watts**
Power consumption @ 0° C: (typical in still air)	3.5 watts* – 11.5 watts**
Dielectric strength:	200 vac

Set point temperature dependence on operating voltage: 0.15° C/volt

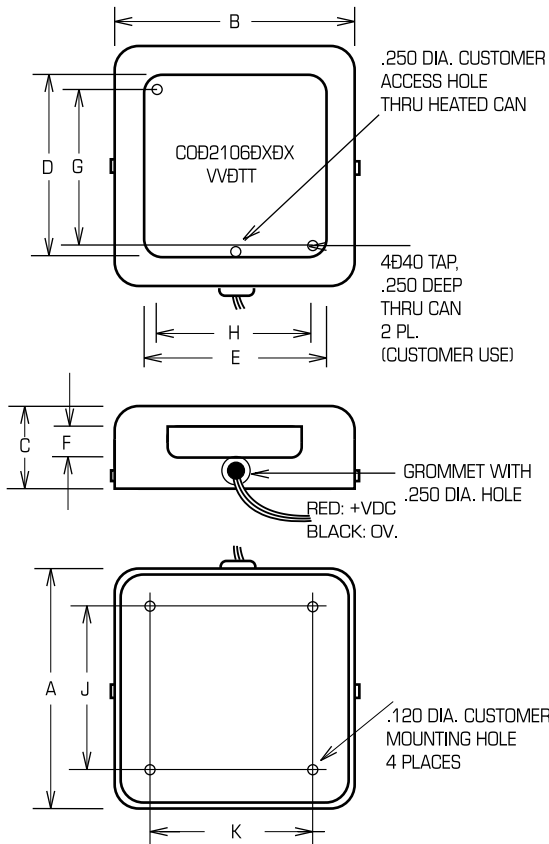
* Values typical for CO-2106-0-0 oven size @ 75° C
** Values typical for CO-2106-4-0 oven size @ 75° C

PURCHASE SPECIFICATIONS

1. Size
2. Voltage
3. Set point temperature

Note:

- (1) OFC will use customer-specified nominal operating voltage in adjusting oven to specified set point temperature. A tolerance of ±2° C will be allowed for this adjustment.
- (2) OFC will assign a "dash number" (CO-2106-X-X-VV-TT) to identify the combinations of specifications you select.



Notes:

1. LX-X: Oven size identification
2. VV: Oven operating voltage
3. TT: Oven set point temperature in ° C
4. Cover material: Aluminum-gold anodized
5. Cavity material: Aluminum-plain anodized
6. Marking: Black ink stamp as shown
7. Oven control: Proportional
8. Set point temp. can be field adjusted over 50° C range
9. Cover may be removed without disconnecting power leads