



**OMEGA**  
***HEATER***  
**COMPANY**

*INFORMATION MATERIAL*

THIS MATERIAL IS MEANT TO BE USED ALONG WITH OUR CATALOG  
IT IS **NOT** A SUBSTITUTE FOR THE CATALOG



## COMPANY OVERVIEW

**Since 1970**, we have been pioneering new developments in heater technology and providing total heating solutions. Heaters are our only business. We are the original and the only **Omega Heater Company**.

As the leader in energy saving heater bands, Omega is the heating line preferred by the plastics industry. We offer a full line of stock and custom heaters, controls & accessories for industrial equipment manufacturers and end users. Our applications engineers are always available to help with your heating needs.

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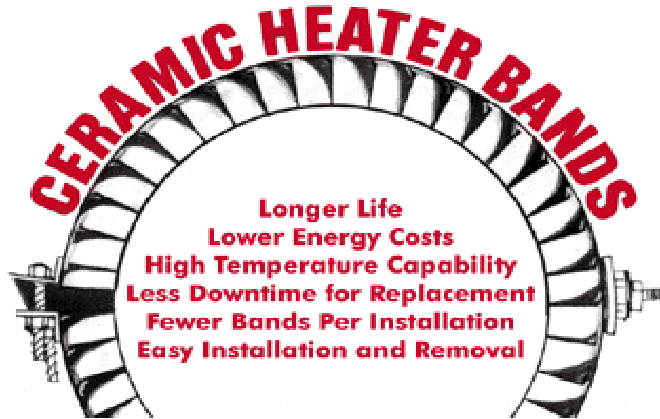
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This material is to be used as an aid to the salesmen in conjunction with our catalog  
*IT IS NOT A SUBSTITUTE FOR THE CATALOG*



**OMEGA**  
HEATER  
COMPANY

**CERAMIC HEATER BANDS**



**5 Styles to Choose From • Energy Saving • Up to 65 Watts/Sq. In.**

**STANDARD** - 5/8" thick, 1/4" thermal insulation, up to 1400 F, 45 watts/sq. in.

**"THE PREFERRED CHOICE OF OEM'S"**

**INSULATION PLUS** - 7/8" thick, 1/2" thermal insulation, energy savings up to 30%

**"THE ENERGY SAVER"**

**SUPER INSULATION PLUS** - 1-1/4" thick, 7/8" thermal insulation, up to 40 watts/sq. in.

**"MAXIMUM ENERGY SAVINGS, MINIMUM SHEATH TEMPERATURES"**

**ULTRA THIN** - 3/8" thick, 3/16" thermal insulation, up to 65 watts/sq. in.

**HIGH PERFORMANCE FOR CRITICAL HIGH TEMP OPERATIONS**

**AIR COOLED** - 3/8" thick, NO Thermal insulation, up to 45 watts/sq. in.

**Developed Especially for Air Cooled Systems**



## A NOTE ON CERAMIC BANDS

Omega manufactures five different styles of ceramic heater bands. Following are features of each style to help you decide which one will suit your needs

### # 1) STANDARD CERAMIC BAND

**5/8" THICK**

**Watt Densities up to 45w / sq. in.**

**1/8" thermal insulation**

**Lowest in cost**

Widely used as a barrel heater on injection molding machines for processing low to medium temperature resins. Also for heating dies pipes and other related equipment

### # 2) INSULATION PLUS

**7/8" THICK**

**Watt Densities up to 45w / sq. in.**

**3/8" thermal insulation**

**Approx. 15% higher in cost then standard ceramic**

Developed for energy saving used in all the above applications.  
Energy savings up to 30%

### # 3) SUPER INSULATION PLUS

**1-1/4" THICK**

**Watt Densities up to 40w / sq. in.**

**3/4" thermal insulation**

**Approx. 10% higher in cost then Insulation Plus**

Not only saves energy but enables the elimination of expensive insulation blankets.  
Ideal for use where lower sheath temperatures are required.

### # 4) ULTRA THIN LINE

**3/8" THICK**

**Watt Densities up to 65w / sq. in.**

**3/16" thermal insulation**

**Lower in cost then most competing premium styles, such as mineral insulated, ceramic, or refractory**

This thin. High temp., high watt density heater can meet the most demanding performance you may require.

### # 5) AIR COOLED

**1/2" THICK**

**Watt Densities up to 45w / sq. in.**

**NO thermal insulation**

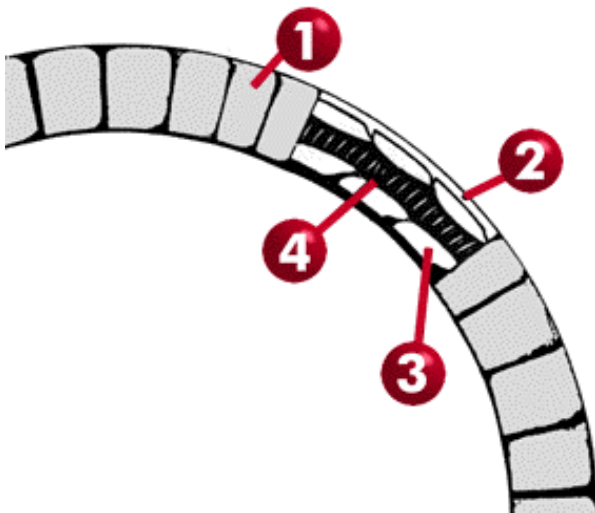
**63% open perforated sheath**

**Can be supplied with shrouds for blowers**



**STANDARD** - 5/8" thick, 1/4" thermal insulation, up to 1400 F, 45 watts/sq. in.  
**"THE PREFERRED CHOICE OF OEM'S"**

### OMEGA QUALITY CONSTRUCTION



**1. Stainless steel sheath**

Resists rust and high temperatures, and provides firm mechanical support. Easily wraps around barrel due to fluted construction.

**2. Thermal insulation**

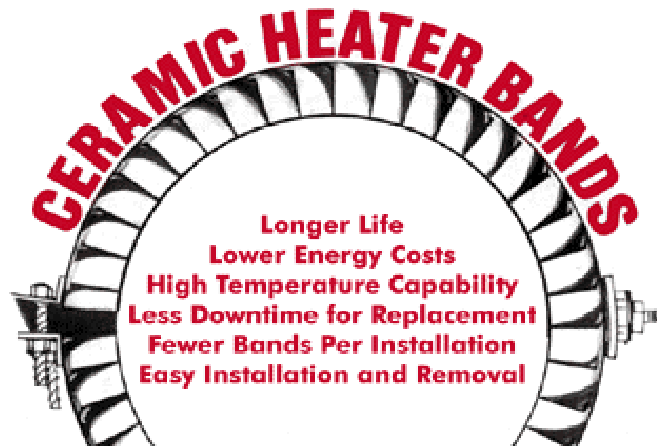
1/4 inch of ceramic fiber prevents heat loss, thereby lowering energy costs.

**3. Ceramic coil supports**

Designed for their dielectric and thermoconductive characteristics, the interlocking feature provides flexibility so band wraps easily around barrel.

**4. Nickel-chrome heating coil**

Precision wound, helical construction gives extended service. A heavier weight than found in mica or other conventional heaters.

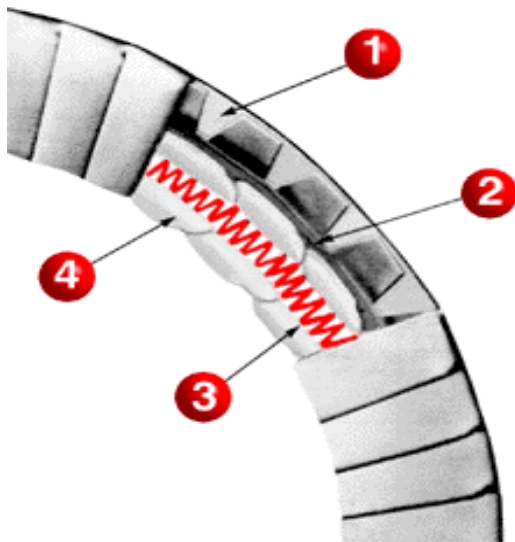


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 E-mail: [omega@omegaheater.com](mailto:omega@omegaheater.com) • Website: [www.omegaheater.com](http://www.omegaheater.com)



**INSULATION PLUS** - 7/8" thick, 1/2" thermal insulation, energy savings up to 30%  
**"THE ENERGY SAVER"**

### OMEGA QUALITY CONSTRUCTION



1. INSULATION PLUS EMPLOYS AN ADDITIONAL 1/4-INCH OF THERMAL INSULATION ENCASED IN A SEPARATE FLEXIBLE STAINLESS STEEL SHELL

2. STANDARD 1/4-INCH THICK THERMAL INSULATION FOUND ON ALL OMEGA CERAMIC BAND HEATERS.

3. HELICAL NICKEL-CHROME COIL FOR EXTENDED SERVICE

4. CERAMIC COIL SUPPORTS

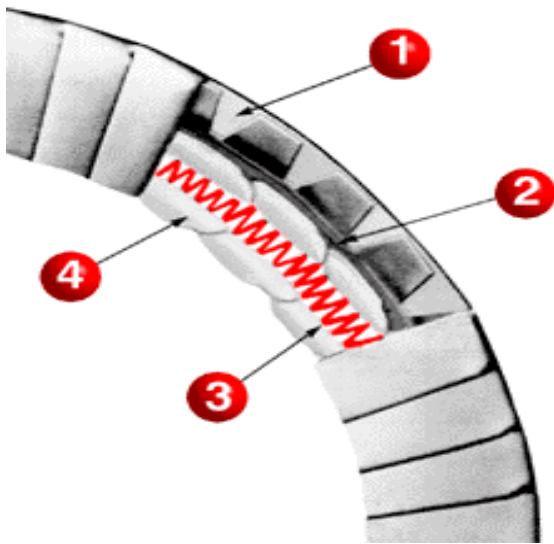
**COOLER AMBIENT TEMPERATURES  
AROUND THE OPERATING MACHINES**





**SUPER INSULATION PLUS - 1-1/4" thick, 7/8" thermal insulation, up to 40 watts/sq. in.  
"MAXIMUM ENERGY SAVINGS, MINIMUM SHEATH TEMPERATURES"**

### OMEGA QUALITY CONSTRUCTION



1. INSULATION PLUS EMPLOYS AN ADDITIONAL 5/8-INCH OF THERMAL INSULATION ENCASED IN A SEPARATE FLEXIBLE STAINLESS STEEL SHELL
2. STANDARD 1/4-INCH THICK THERMAL INSULATION FOUND ON ALL OMEGA CERAMIC BAND HEATERS.
3. HELICAL NICKEL-CHROME COIL FOR EXTENDED SERVICE
4. CERAMIC COIL SUPPORTS

**COOLER AMBIENT TEMPERATURES  
AROUND THE OPERATING MACHINES**



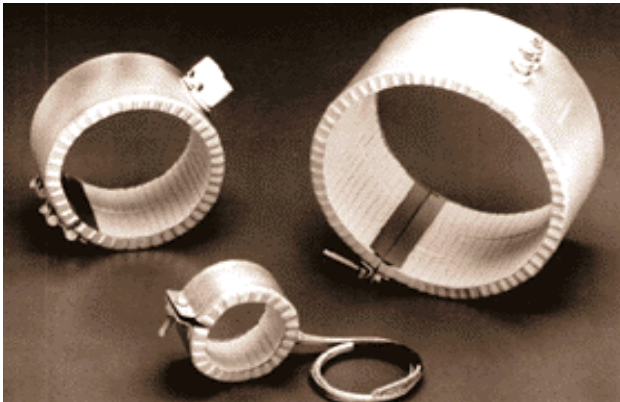
OMEGA HEATER CO. Inc. 2059 Ninth Avenue, Ronkonkoma, NY 11779-6233 Phone: 631-588-8820 Fax: 631-588-8953  
E-mail: [omega@omegaheater.com](mailto:omega@omegaheater.com) • Website: [www.omegaheater.com](http://www.omegaheater.com)



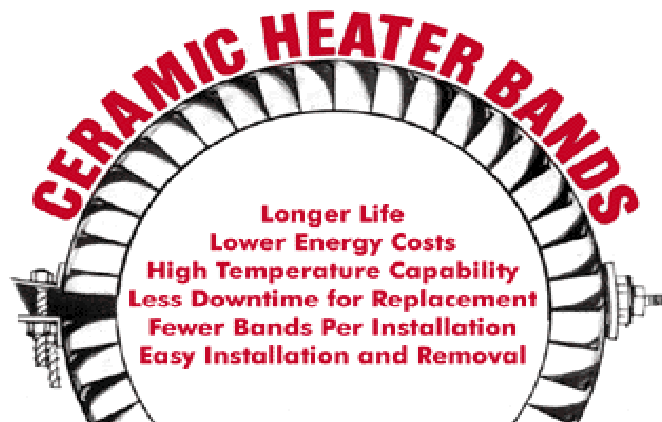
**ULTRA THIN - 3/8" thick, , 3/16" thermal insulation, up to 65 watts/sq. in.  
HIGH PERFORMANCE FOR CRITICAL HIGH TEMP OPERATIONS**

### **OMEGA QUALITY CONSTRUCTION**

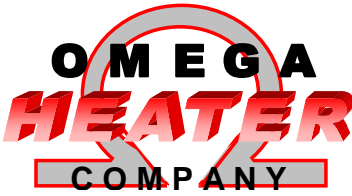
- 1. 3/16-INCH THICK THERMAL INSULATION**
- 2. HELICAL NICKEL-CHROME COIL FOR EXTENDED SERVICE**
- 3. CERAMIC COIL SUPPORTS**



**"HIGH PERFORMANCE  
FOR CRITICAL HIGH  
TEMP OPERATIONS"**



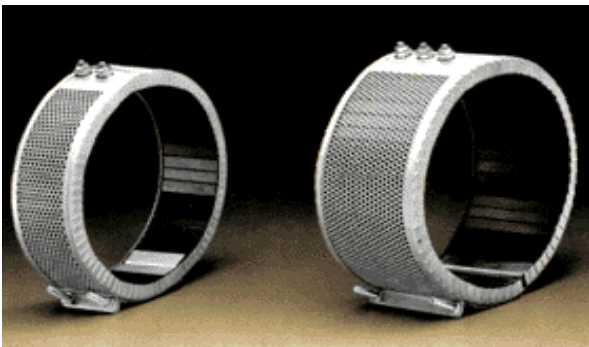
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E-mail: [omega@omegaheater.com](mailto:omega@omegaheater.com) • Website: [www.omegaheater.com](http://www.omegaheater.com)



**AIR COOLED** - 3/8" thick, , **NO Thermal insulation, up to 45 watts/sq. in.**  
**Developed Especially for Air Cooled Systems**

### OMEGA QUALITY CONSTRUCTION

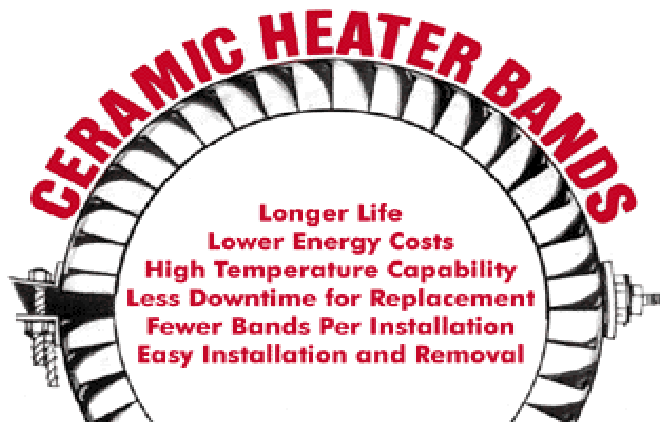
1. PERFORATED OUTER SHEATH
2. **NO** THERMAL INSULATION
3. HELICAL NICKEL-CHROME COIL FOR EXTENDED SERVICE
4. CERAMIC COIL SUPPORTS



**Omega Heater Company's, super-efficient and economical air cooled ceramic heater bands are designed for use on extrusion machinery or on any heat/cool operation.**

Omega's air cooled ceramic heater bands are available in various sizes to either accommodate new designs or to replace less efficient, more expensive cast aluminum heaters.

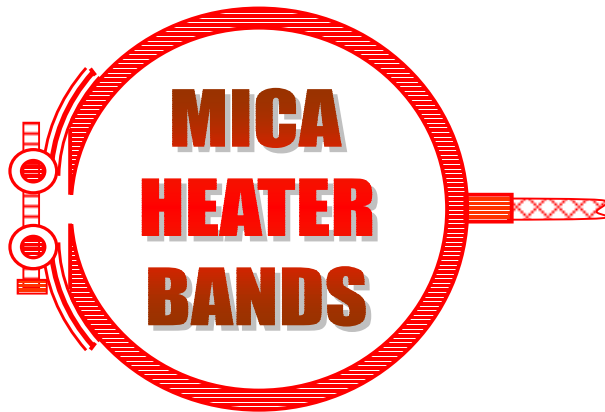
They can be manufactured to replace individual heaters in the field or be made as full units with shrouds for blowers



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## MICA BANDS



The use of mica as an electrical insulator produces a thin, efficient heater. Heat from the precisely wound Nichrome element is quickly transferred to the working surface. This allows for fast heat-up, and response. Mica provides excellent dielectric strength and heat transfer capability. The mica element is encased in a corrosion resistant sheath.

Omega Heater manufactures 26 basic constructions with a variety of electrical terminations and mounting configurations. We also manufacture custom shapes and special features upon request.

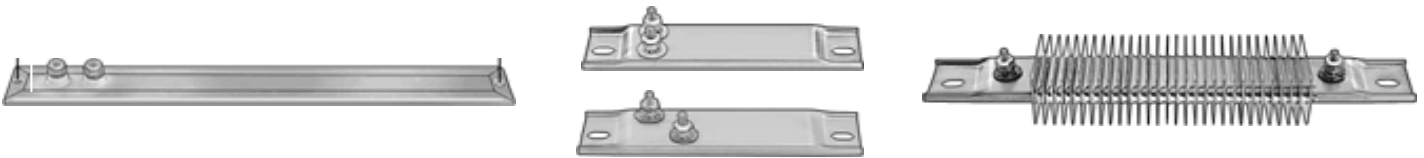
### BELOW ARE SOME TYPICAL TERMINATIONS AND CLAMPING



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## STRIP HEATERS



**3 Styles to Choose From • Economical • Radiant • Air Cooled**

**MICA STRIP HEATERS** - *Thin and Light, Fast Response, Low cost  
For hot plates, sealing Equipment, Hot Stamping, Dies & Molds, Etc..*

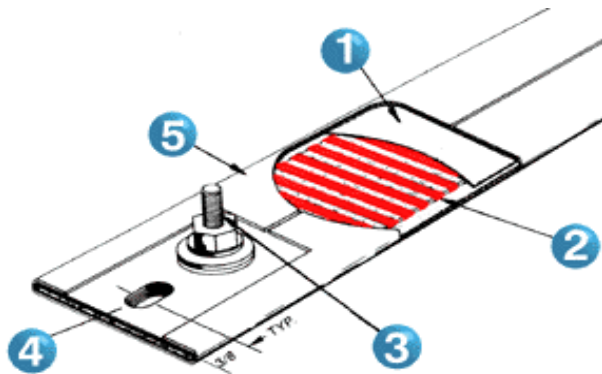
**CERAMIC STRIP HEATERS** - *1/4" , 5/16" and 3/8" Thick, up to 45 Watts / sq. in.  
Can Be Used As Radiant Heaters or Die Heaters*

**FINNED STRIP HEATERS** - *5/16" Thick, Fin Size 1-3/8" x 2", up to 50 Watts / sq. in.  
Used For Convection Heating or any Process Requiring a High Velocity air stream*

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**MICA STRIPS HEATERS - 3/16" Thick, up to 35 Watts / sq. in.  
FOR HOT PLATES, SEALING EQUIPMENT, HOT STAMPING, DIES AND MOLDS, ETC.**



### OMEGA QUALITY CONSTRUCTION

1. Top quality MICA insulation
2. Nickel-chrome ribbon engineered for longest life at rated watts & volts
3. Post terminals - riveted for positive electrical connection to element
4. 1/4 x 3/8 mounting hole
5. Standard steel sheath with special surface treatment to increase heat transfer and to retard oxidation (stainless steel option.)

**"L" series (flexible leads)**

### SPECIFICATIONS

#### Length

Minimum without mounting holes = 2-1/2"  
Minimum with mounting holes = 3-1/2"  
Maximum consult Omega

#### Width

Minimum, Types P1R-L2CR = 3/4"  
Minimum, Type P3R = 1-3/4"  
Maximum consult Omega

#### Thickness

Nominal 3/16

#### Sheath Temperature

Maximum, Standard units 900 Deg. 482 Deg C  
Maximum, Stainless Steel Sheath  
1200 Deg. F 650 Deg. C

#### Wattage

35 WATTS/sq. in. recommended max.

#### Terminals

10-24 x 7/16 POST TERM. Or 12" FLEX. LEADS

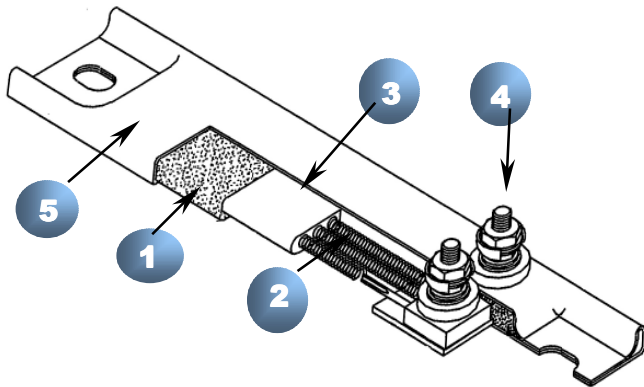
#### Voltage

Maximum 480VAC



**CERAMIC STRIP HEATERS - 5/16" and 3/8" Thick, up to 45 Watts / sq. in.**  
**Thermoforming • Air Heating • Platens • Molds • Ovens • Sealing • Dies • Tank Heaters • Hot**

**4 SIZES AVAILABLE 1/4" x 1" • 5/16" x 1" • 5/16" x 1-1/2" • 3/8 x 1-1/2"**



**OMEGA QUALITY CONSTRUCTION**

1. Magnesium Oxide insulation
2. Nickel-chrome coil engineered for longest life at rated watts & volts
3. Ceramic Core
4. Post terminals -10-24 thread
5. Stainless Steel extruded tube for sheath

**OPTIONS**

- LEADS** - Off top surface or from end
- LEADS** - in braid or armor

**NOTE: 1/4" THICK HEATERS - LEADS ONLY**  
**SPECIFICATIONS**

**ELEMENT -**  
 Nickel/Chrome Coil  
**SHEATH -**  
 Stainless Steel (Heavy Gauge)

**THICKNESS -**  
 1/4"-5/16"-3/8"  
**TEMPERATURES -**  
 Up to 1400 deg.F  
**WATT DENSITY -**  
 Up to 45 watts/square inch

**VOLTAGE -**  
 Up to 240 volts - Consult factory for higher voltage

**TERMINALS -**  
 Post Type-Standard 10-24 Thread  
 1/4" x 1" **WIDE LEADS ONLY**

**LENGTH -**  
 Minimum 4" up to any practical length

**MOUNTING TABS -**  
 Available with or without tabs

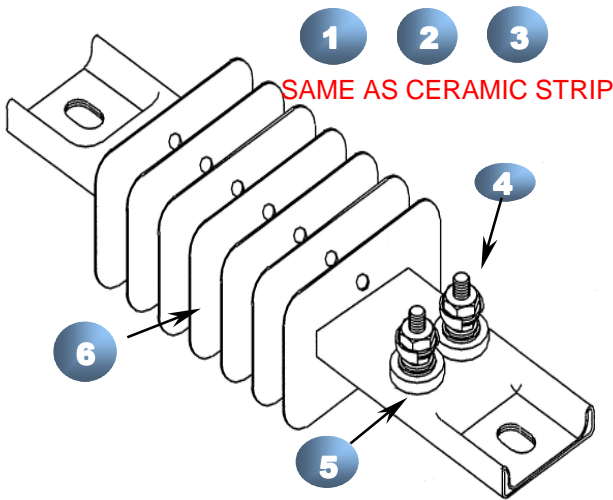
**MOUNTING SLOTS -**  
 5/16" X 1/2"



**FINNED STRIP HEATERS - 5/16" Thick, Fin Size 1-3/8" x 2", up to 50 Watts / sq. in.  
Used For Convection Heating or any Process Requiring a High Velocity air stream**

**APPLICATIONS:**

Air & Gas Heating, Oven & Duct Heating, Load Banks, Space Heaters, Heat Curing, Food Warmers, Shrink Tunnels, Moisture Protection, Ink Drying



**OMEGA QUALITY CONSTRUCTION**

1. Magnesium Oxide insulation
2. Nickel-Chrome coil engineered for longest life at rated watts & volts
3. Ceramic Core
4. Post terminals -10-24 thread
5. Stainless Steel extruded tube for sheath
6. FINS

**Line voltage over 300 volts require secondary insulating bushing with larger Mtg. Slots**

**MAXIMUM WATT DENSITY**

**STILL AIR**

- Up to 300 F - 20 watts/sq. in.
- 300 F to 600 F - 16 watts/sq./in.
- 600 to 800 F - 10 watts/sq./in.

**MOVING AIR- 600 FT/MIN.**

- Up to 200 F - 40 watts/sq. in.
- 200 to 400 F - 30 watts/sq./in.
- 400 to 600 F - 20 watts/sq./in.

**MOVING AIR- 1200 FT/MIN.**

- Up to 200 F - 50 watts/sq. in.
- 200 to 400 F - 35 watts/sq./in.
- 400 to 600 F - 25 watts/sq./in.
- 400 to 600 F - 25 watts/sq./in.

**SPECIFICATIONS**

**Element - Nickel Chrome coil**

**Sheath - Seamless Stainless Steel**

**Thickness- 5/16"**

**Fin Size - 1-3/8" x 2"**

**Fin Material - Nickel Plated Steel (ST.ST. Opt.)**

**Fin Spacing - 6 per inch**

**Mounting Slot - 5/16" x 1/2 " 3/8" x 1/2"**



# REFERENCE DATA

## Variations Of Ohm's Law

### OHM'S LAW

#### VOLTS

$$\text{Volts} = \sqrt{\text{Watts} \times \text{Ohms}}$$

$$\text{Volts} = \frac{\text{Watts}}{\text{Amperes}}$$

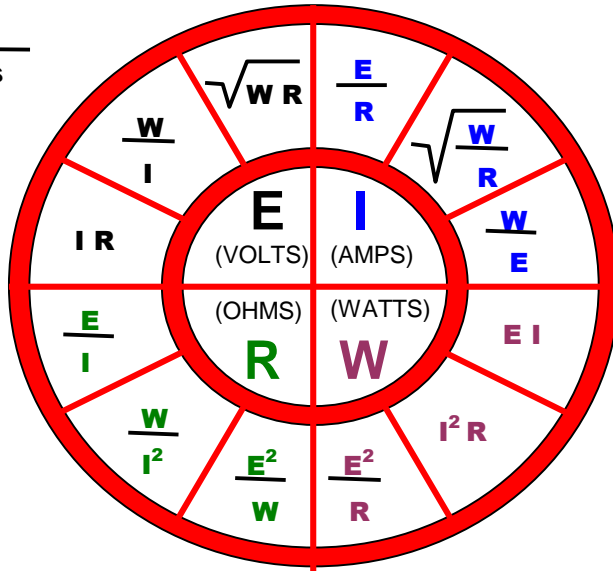
$$\text{Volts} = \text{Amperes} \times \text{Ohms}$$

#### AMPERES

$$\text{Amperes} = \frac{\text{Volts}}{\text{Ohms}}$$

$$\text{Amperes} = \frac{\text{Watts}}{\text{Volts}}$$

$$\text{Amperes} = \sqrt{\frac{\text{Watts}}{\text{ohms}}}$$



#### OHMS

$$\text{Ohms} = \frac{\text{Volts}}{\text{Amperes}}$$

$$\text{Ohms} = \frac{\text{Volts}^2}{\text{Watts}}$$

$$\text{Ohms} = \frac{\text{Watts}}{\text{Amperes}^2}$$

#### WATTS

$$\text{Watts} = \frac{\text{Volts}^2}{\text{Ohms}}$$

$$\text{Watts} = \text{Amperes}^2 \times \text{Ohms}$$

$$\text{Watts} = \text{Volts} \times \text{Amperes}$$

Wattage varies directly as ratio of voltage squared

$$W_2 = W_1 \times \left(\frac{E_2}{E_1}\right)^2$$

$$\text{3 Phase Amperes} = \frac{\text{Total Watts}}{\text{Volts} \times 1.732}$$



## REFERENCE DATA

### CALCULATING WATT DENSITY

#### CERAMIC AND MICA BAND HEATERS

$$\text{WATTS / SQ. IN} = \frac{\text{WATTAGE}}{(\text{ID} \times \text{WIDTH} \times 3.1416) - (\text{COLD AREA})}$$

#### CERAMIC AND MICA STRIP HEATERS

$$\text{WATTS / SQ. IN} = \frac{\text{WATTAGE}}{(\text{HEATED LENGTH} \times \text{WIDTH})}$$

#### CHANNEL STRIPS HEATERS

$$\text{WATTS / SQ. IN} = \frac{\text{WATTAGE}}{(\text{HEATED LENGTH} \times 3.625)}$$

#### FINNED STRIP HEATERS

$$\text{WATTS / SQ. IN} = \frac{\text{WATTAGE}}{((\text{OVERALL LENGTH} - \text{"X"}) \times 3.625)}$$

- For Parallel Terminals "X" = 4.625"  
For Offset Terminals "X" = 5.25"  
For Tandem Terminals "X" = 5.25"

**NOTE: Cold area (Gaps, Holes, Cutouts, Terminal Area, Etc.) May Be Subtracted From Above For More Detailed Calculations.**



## HEATER BAND WIRING

### COMMON CONDITIONS

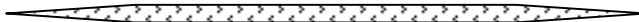
#### ONE PIECE BANDS:

Rated for a single voltage. 120 , 240 , 480.



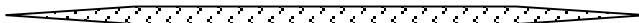
#### TWO PIECE BANDS:

Rated for 240V Total 120V / 1/2, 480V Total 240V / 1/2



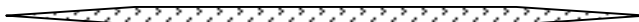
#### PARALLEL WIRING:

Used to wire several heaters of the same voltage by zone.



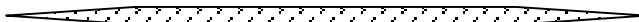
#### SERIES WIRING:

Used to wire heaters rated at part of the total voltage



#### DUAL VOLTAGE:

For bands that are manufactured to operate at two different voltages



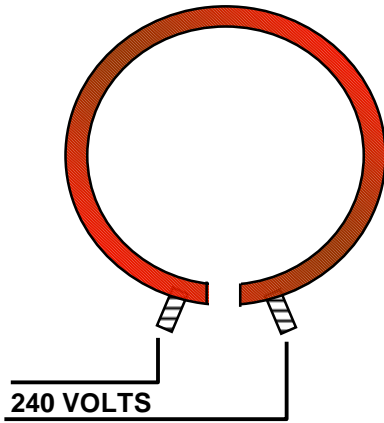
#### 3 PHASE WIRING:

Used to limit the current load on bands of high wattage and low voltage.

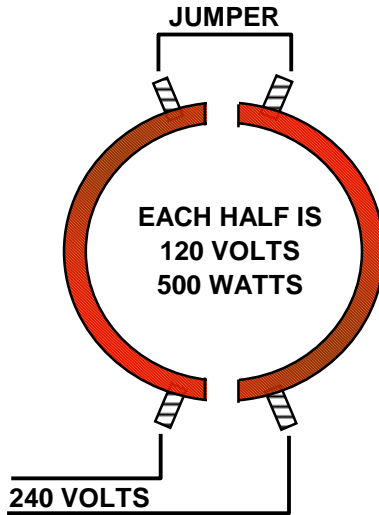


**ONE PIECE AND TWO PIECE BANDS:**

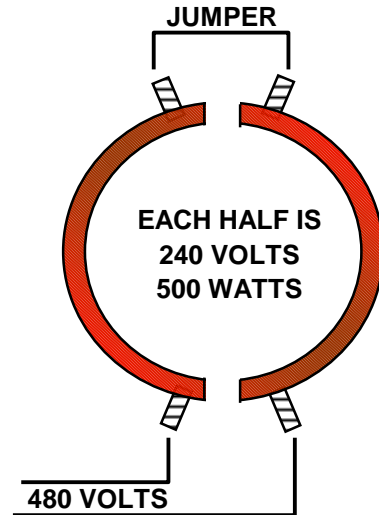
**1 PIECE BAND RATED  
240V / 1,000 WATTS**



**2 PIECE BAND RATED  
240 VOLTS / 1,000 WATTS  
EACH HALF IS 120 V / 500 W  
WIRE EACH HALF IN SERIES**

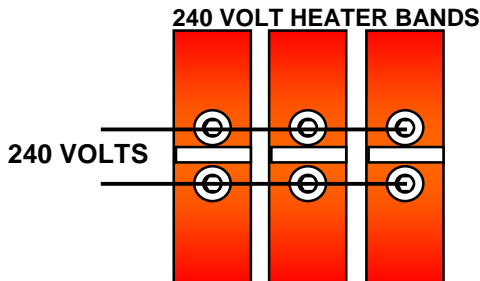


**2 PIECE BAND RATED  
480 VOLTS / 1,000 WATTS  
EACH HALF IS 240 V / 500 W  
WIRE EACH HALF IN SERIES**

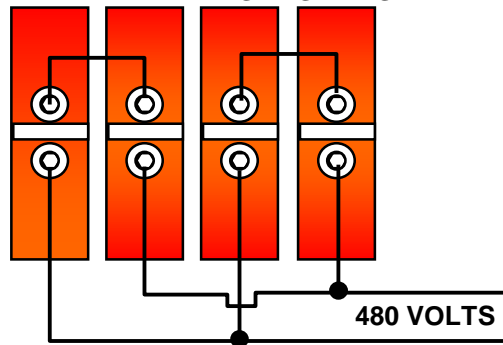


**PARALLEL AND SERIES WIRING**

**PARALLEL WIRING:  
HEATER BANDS ARE NORMALLY  
WIRED IN PARALLEL BY ZONE**

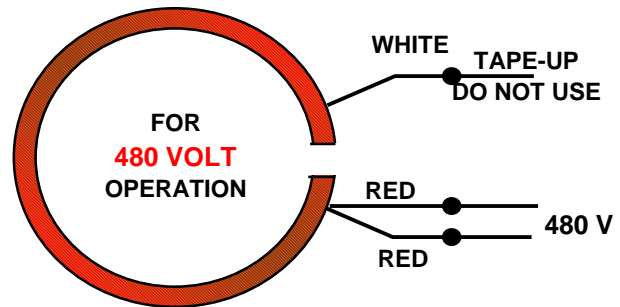
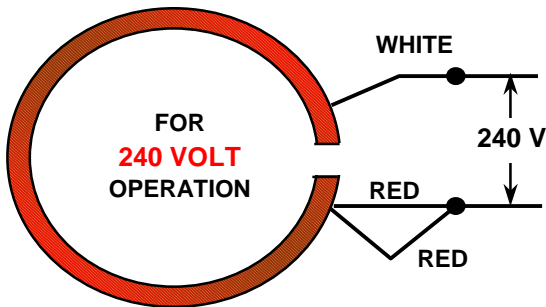
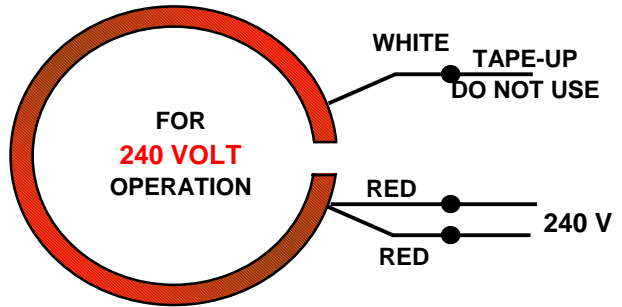
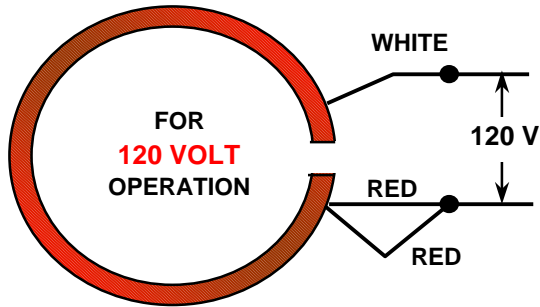


**SERIES WIRING:  
ILLUSTRATION SHOWS 240 VOLT BANDS  
WIRED TO ACCEPT 480 VOLTS  
BANDS MUST BE OF EQUAL WATTAGE AND  
WIRED BY PAIRS IN SERIES**





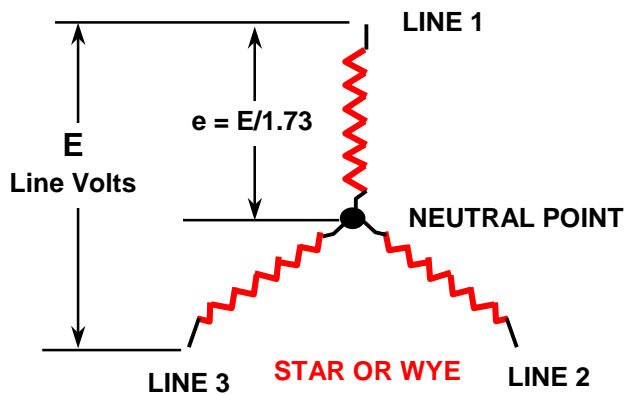
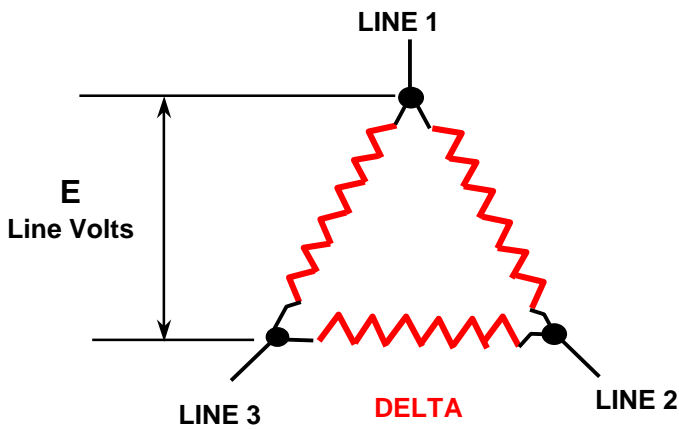
**DUAL VOLTAGE:**



**3 PHASE**

$$\text{Element Resistance (Hot)} = \frac{1.731 E}{I}$$

$$\text{Element Resistance (Hot)} = \frac{E}{1.731}$$



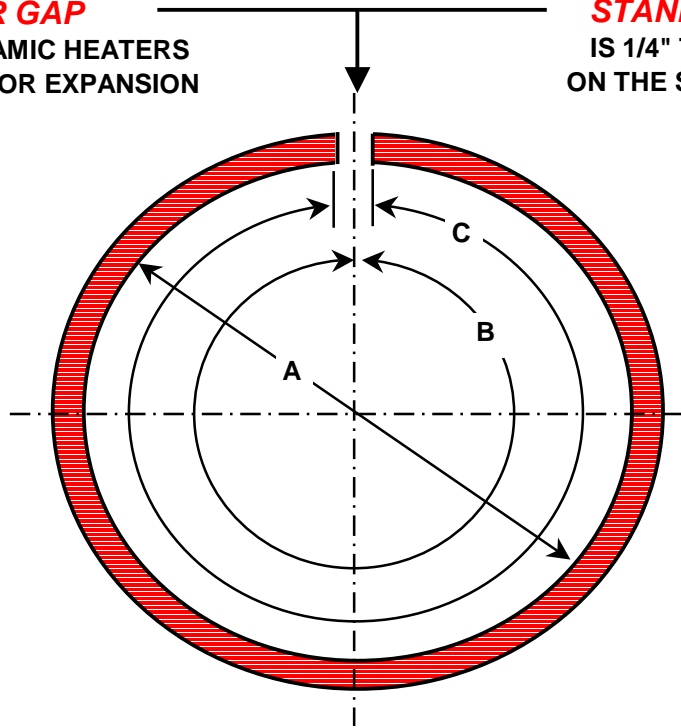
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## SIZING BAND HEATERS IN THE FIELD

**HEATER GAP**  
ALL MICA & CERAMIC HEATERS  
REQUIRE A GAP FOR EXPANSION

**STANDARD GAP SIZE**  
IS 1/4" TO 1/2" DEPENDING  
ON THE SIZE OF THE HEATER



### GETTING THE PROPER DIAMETER FOR THE BAND IS CRITICAL TO INSURE PROPER FIT

- 1) The best way to size the heater is if the **OUTSIDE DIAMETER (A)** of the part being heated is known. This would be the **INSIDE DIAMETER (A)** of the band, and the proper gap for the heater size will be used.
- 2) The diameter can also be found by measuring the **CIRCUMFERENCE (B)** of the item being heated. From this the **DIAMETER** needed can be calculated.
- 3) If working from heaters in a stock bin **DO NOT** close the heaters completely  
**REMEMBER THE GAP**
- 4) Try holding the heater with a 1/4" gap and measure the **DIAMETER (A)** with a ruler.  
**OR**
- 5) Measure the inside surface of the heater "**C**" from end to end, add a 1/4" for the gap this will give you the **CIRCUMFERENCE (B)** of the heater.
- 6) If special gaps are required it is the responsibility of the customer to advise the manufacturer

**THESE DIMENSIONS ARE APPROXIMATE.**

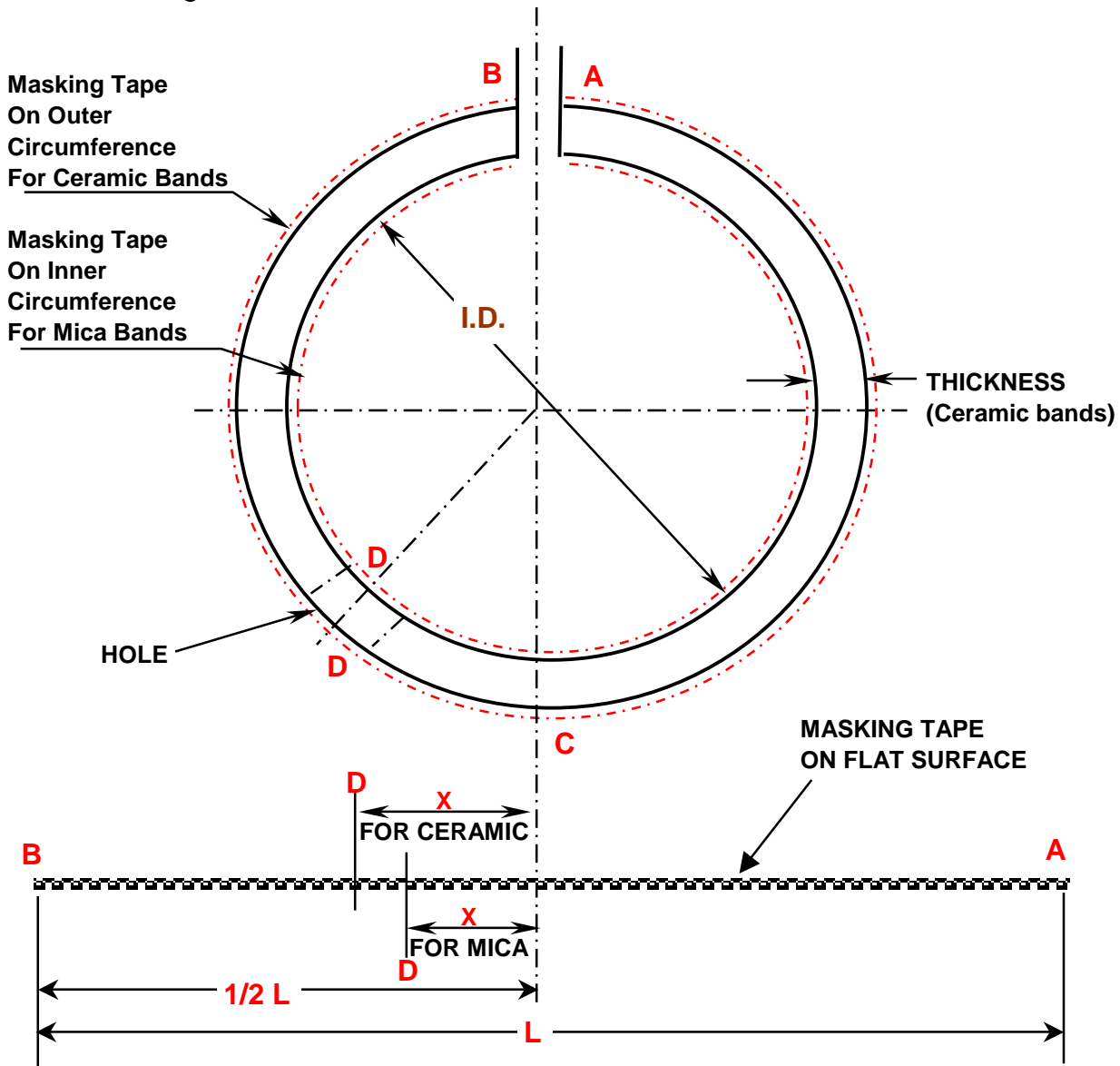
**ONLY STEP # 1 CAN BE USED AS AN ACCURATE MEASUREMENT FOR MANUFACTURING**

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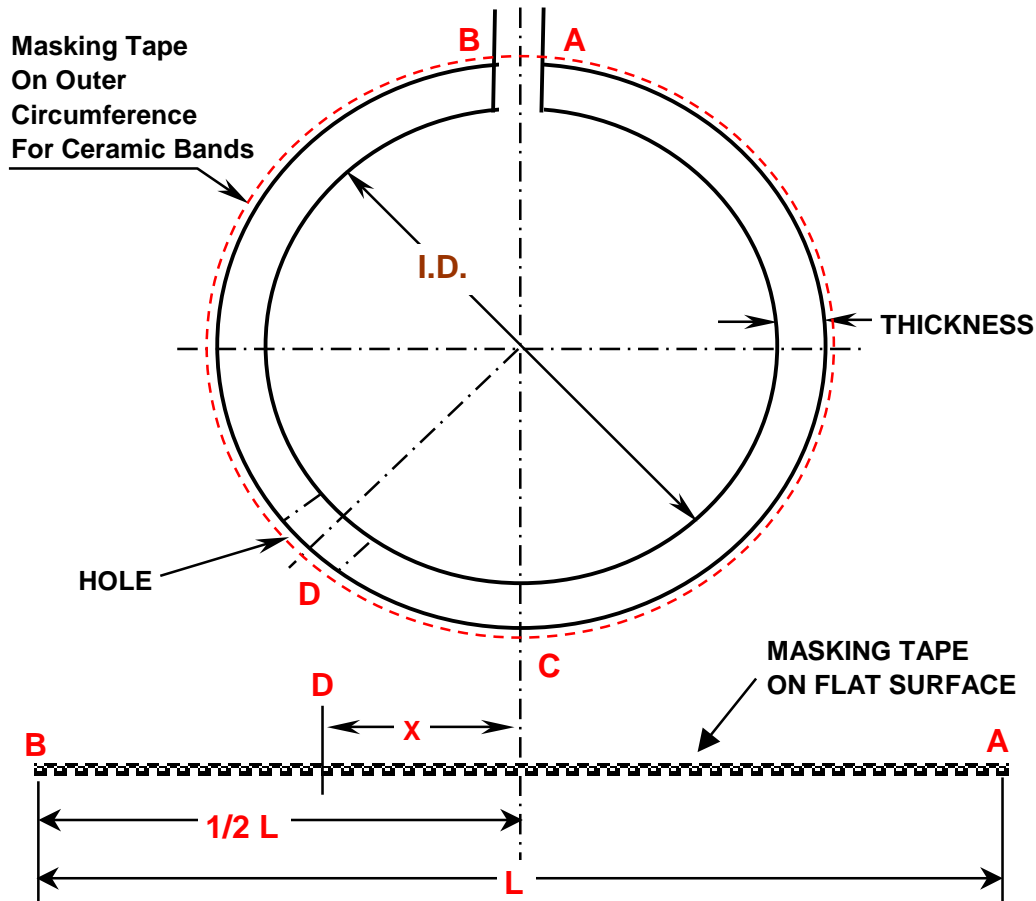
# LOCATING HOLES IN BAND HEATERS



FOR CERAMIC BANDS SEE PAGE	22
FOR MICA BANDS SEE PAGE	23
FOR FORMULAS SEE PAGE	24



## HOLE LOCATION FOR CERAMIC BANDS

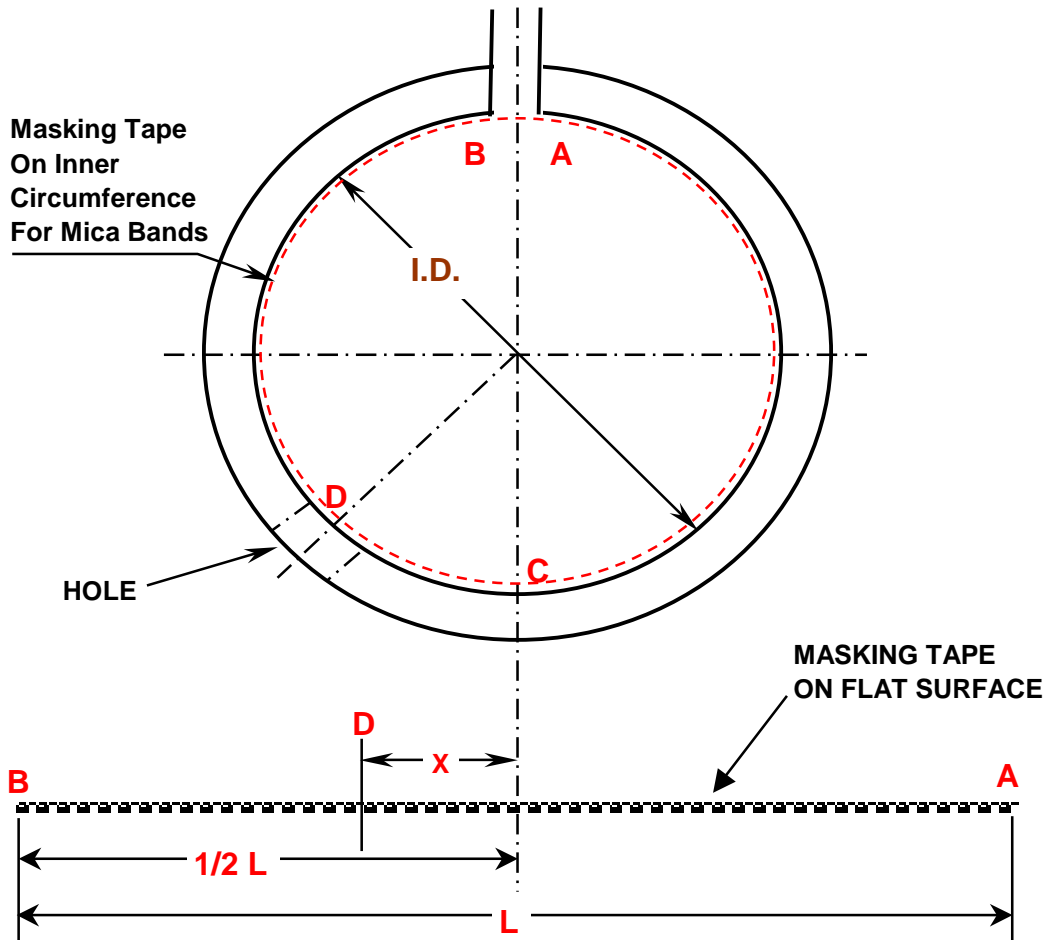


- 1) Using a piece of masking tape on the **OUTSIDE** surface of the heater, mark the two ends, points **"A"** and **"B"**, and the centers of the holes, point **"D"**.
- 2) Take the tape off the heater and lay it on a flat surface.
- 3) Find the center of the tape from points **"A"** and **"B"**, this is the center of the heater shell, point **"C"** and your reference point.
- 4) From point **"C"** measure to the center of the holes. For multiple holes measure from point **"C"** to the center of each hole, point **"D"**, = **(X)**.
- 5) On Ceramic Bands we must also know the thickness of the heater.
- 6) Measurements from the end of the heater may not be accurate due to differences in manufacturing.

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## HOLE LOCATION FOR MICA BANDS



- 1) Using a piece of masking tape on the **INSIDE** surface of the heater, mark the two ends, points "A" and "B", and the centers of the holes, point "D".
- 2) Take the tape off the heater and lay it on a flat surface.
- 3) Find the center of the tape from points "A" and "B", this is the center of the heater shell, point "C" and your reference point.
- 4) From point "C" measure to the center of the holes. For multiple holes measure from point "C" to the center of each hole, point "D", = (X).
- 5) This procedure can be done on the outside surface of the heater but must be **NOTED** as such
- 6) Measurements from the end of the heater may not be accurate due to differences in manufacturing.

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## FORMULAS FOR LOCATING HOLES

### CONVERTING INCHES TO DEGREES

$$1 \text{ DEG.} = \text{DIA.} \times \frac{\pi}{360}$$

DIA. = I.D. For Mica Bands  
O.D. For Ceramic Bands  
(I.D. + 2 x Thickness)

$$\text{TOTAL DEG.} = \frac{X}{\text{in./deg.}}$$

Where X = Inches Of Length From  
Centerline Of Heater (Point C)  
To Centerline Of Hole (Point D)

$$\pi = 3.1416''$$

**EXAMPLE:** MICA BAND 10" I.D.,(1) HOLE, 5-1/4" FROM POINT C TO POINT D

$$1 \text{ DEG.} = \frac{10 \times \pi}{360} = .087 \text{ inches}$$

$$\text{TOTAL DEG.} = \frac{X}{.087} = \frac{5.25}{.087} = 60 \text{ DEG.}$$

#### **FOR ORDERING PROVIDE:**

**DEGREES FROM CENTERLINE OF HEATER ON INSIDE SURFACE**

**OR**

**DISTANCE (X) FROM CENTERLINE OF HEATER TO CENTERLINE OF HOLE  
ON INSIDE SURFACE**

**OR**

**DISTANCE (X) FROM CENTERLINE OF HEATER TO CENTERLINE OF HOLE  
AND HEATER THICKNESS ON OUTSIDE SURFACE**

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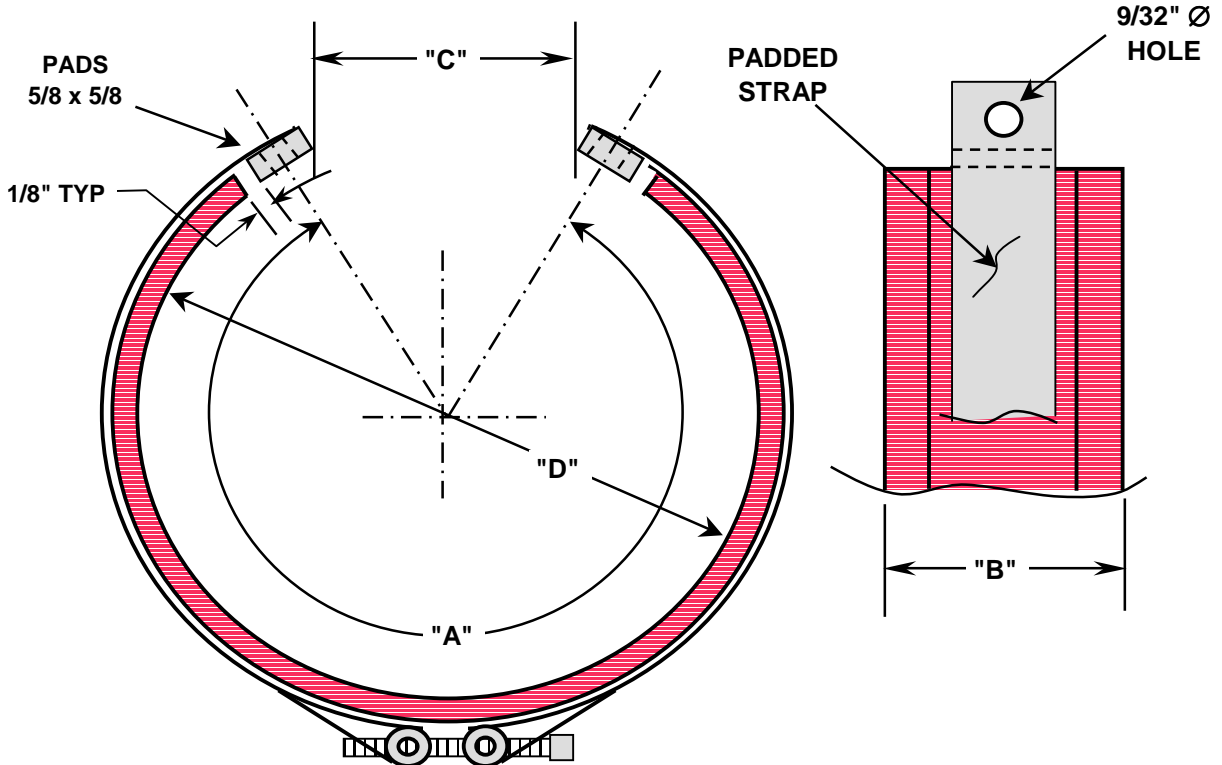


MEASURING PARTIAL COVERAGE BANDS

**MICA BANDS TYPE 13**

ONE PIECE CONSTRUCTION

PADDED CLAMPING STRAP



OR

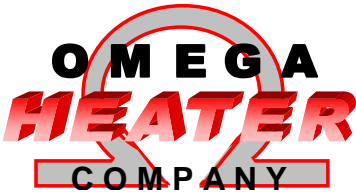
HEATER COVERAGE	DIM "A" =	0
HEATER WIDTH	DIM "B" =	"
HEATER GAP	DIM "C" =	"
HEATER DIAMETER	DIM "D" =	"

**NOTES**

- (1) Termination can be Lead Wires or Post Terminals. (Specify location)
- (2) Straps are 5/8" wide with 10-24 B/N unless specified.
- (3) Number of straps is to be specified by customer
- (4) Hole size in pads is 9/32" unless specified

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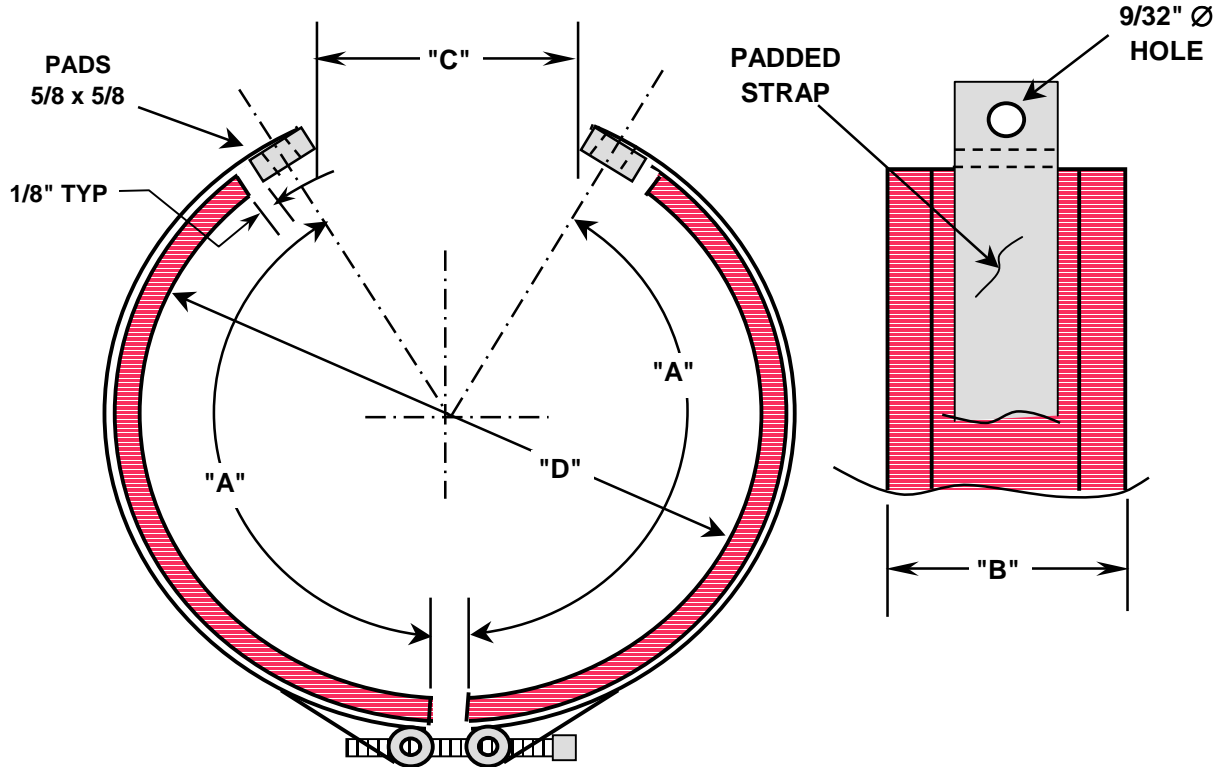


MEASURING PARTIAL COVERAGE BANDS

**MICA BANDS TYPE 13**

**TWO** PIECE CONSTRUCTION

PADDED CLAMPING STRAP



OR

HEATER COVERAGE	DIM "A" =	0
HEATER WIDTH	DIM "B" =	"
HEATER GAP	DIM "C" =	"
HEATER DIAMETER	DIM "D" =	"

**NOTES**

- (1) Termination can be Lead Wires or Post Terminals. (Specify location)
- (2) Straps are 5/8" wide with 10-24 B/N unless specified.
- (3) Number of straps is to be specified by customer
- (4) Hole size in pads is 9/32" unless specified

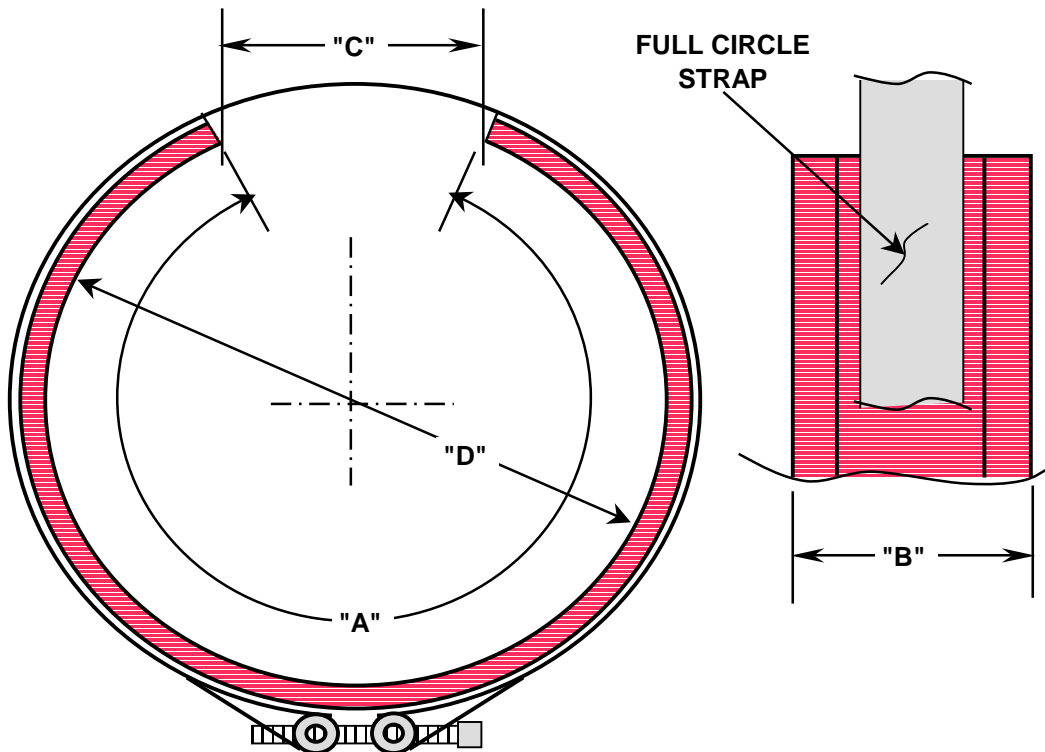


**MEASURING PARTIAL COVERAGE BANDS**

**MICA BANDS TYPE 13**

**ONE PIECE CONSTRUCTION**

**FULL CIRCLE CLAMPING STRAP**



**OR**

HEATER COVERAGE	DIM "A" =	0
HEATER WIDTH	DIM "B" =	"
HEATER GAP	DIM "C" =	"
HEATER DIAMETER	DIM "D" =	"

**NOTES**

- (1) Termination can be Lead Wires or Post Terminals. (Specify location)
- (2) Straps are 5/8" wide with 10-24 B/N unless specified.
- (3) Number of straps is to be specified by customer

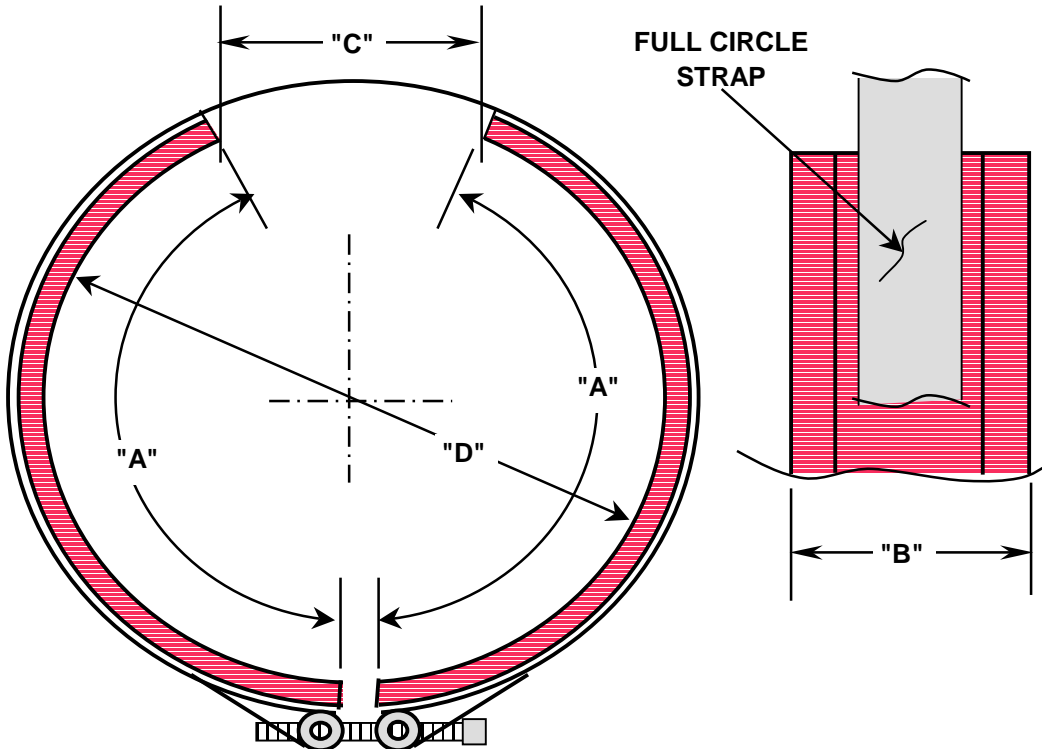


MEASURING PARTIAL COVERAGE BANDS

**MICA BANDS TYPE 13**

**TWO** PIECE CONSTRUCTION

FULL CIRCLE CLAMPING STRAP



OR

HEATER COVERAGE	DIM "A" =	0
HEATER WIDTH	DIM "B" =	"
HEATER GAP	DIM "C" =	"
HEATER DIAMETER	DIM "D" =	"

**NOTES**

- (1) Termination can be Lead Wires or Post Terminals. (Specify location)
- (2) Straps are 5/8" wide with 10-24 B/N unless specified.
- (3) Number of straps is to be specified by customer

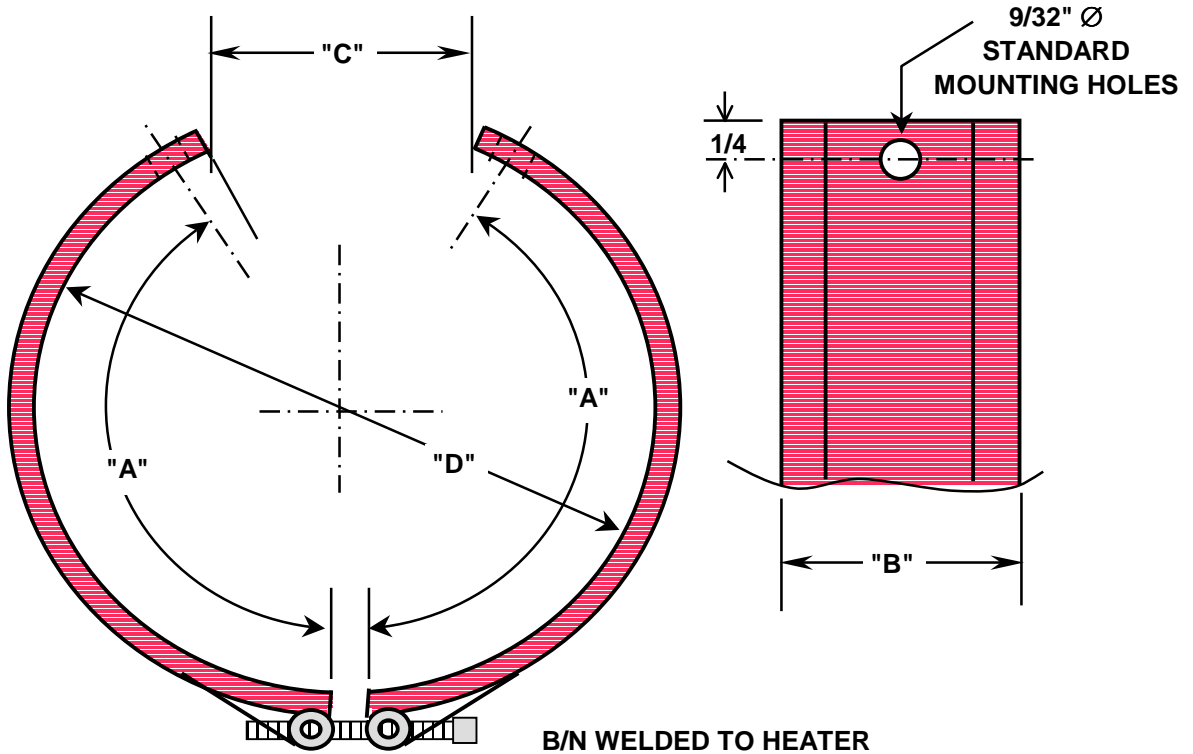


**MEASURING PARTIAL COVERAGE BANDS**

**MICA BANDS TYPE 13**

**MUST BE TWO** PIECE CONSTRUCTION

**SPECIAL LOCK-UP**



**OR**

HEATER COVERAGE	DIM "A" =	0
HEATER WIDTH	DIM "B" =	"
HEATER GAP	DIM "C" =	"
HEATER DIAMETER	DIM "D" =	"

**NOTES**

- (1) Termination can be Lead Wires or Post Terminals. (Specify location)
- (2) Barrel nuts may be 10-24 or 1/4-20 thread depending on heater width (B)
- (3) Number, location and size of mounting holes is to be specified by customer

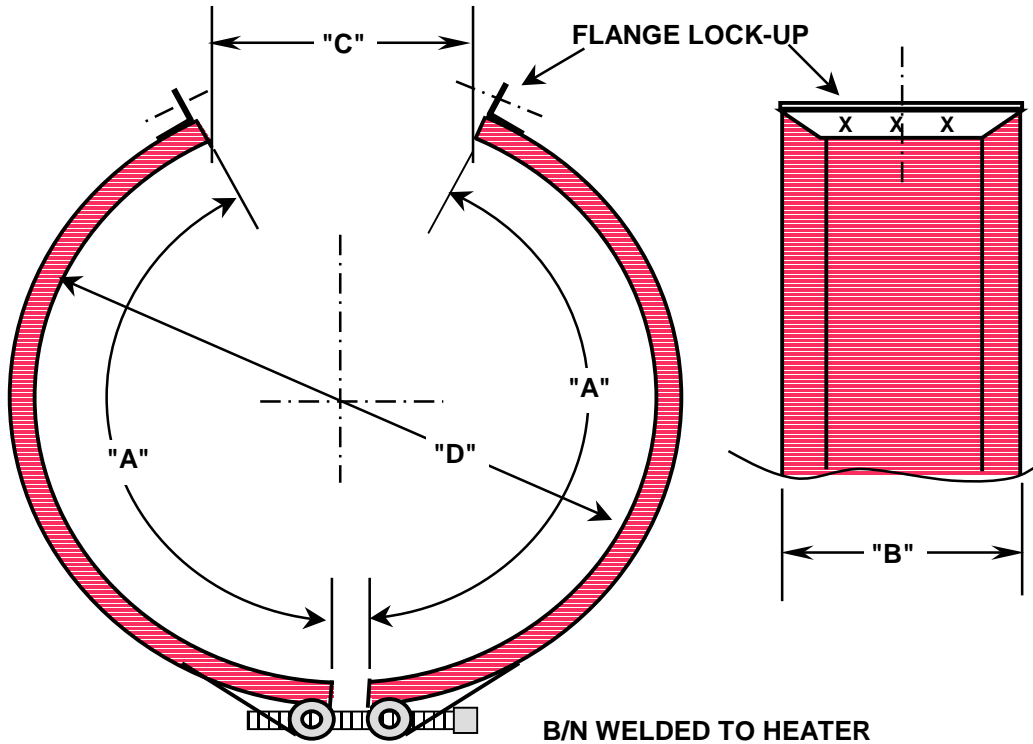


MEASURING PARTIAL COVERAGE BANDS

**MICA BANDS TYPE 13**

**MUST BE TWO** PIECE CONSTRUCTION

SPECIAL LOCK-UP



<b>OR</b>	HEATER COVERAGE	DIM "A" =	0
	HEATER WIDTH	DIM "B" =	"
	HEATER GAP	DIM "C" =	"
	HEATER DIAMETER	DIM "D" =	"

**NOTES**

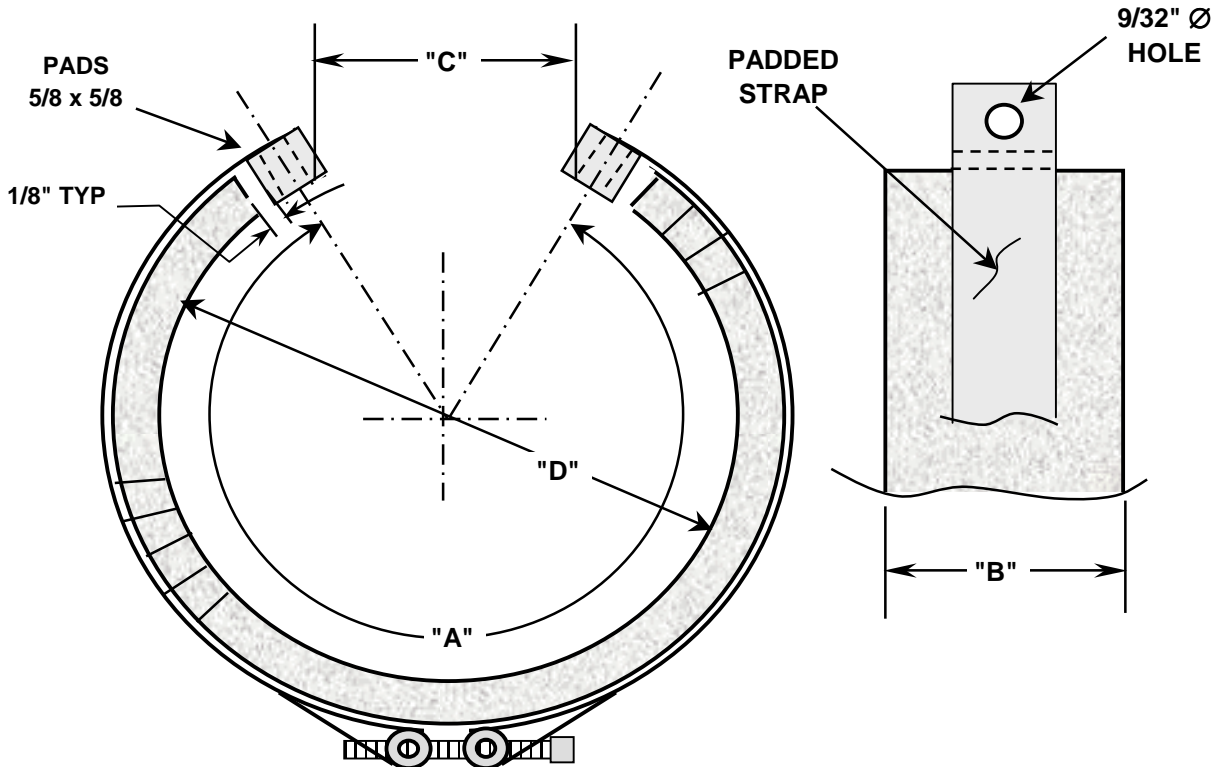
- (1) Termination can be Lead Wires or Post Terminals. (Specify location)
- (2) Barrel nuts may be 10-24 or 1/4-20 thread depending on heater width (B)
- (3) Flange size to be Specified by customer
- (4) Number, location and size of flange holes is to be specified by customer



MEASURING PARTIAL COVERAGE BANDS  
**CERAMIC BANDS**

**ONE PIECE CONSTRUCTION**

**PADDED CLAMPING STRAP**



<b>OR</b>	HEATER COVERAGE	DIM "A" =	0
	HEATER WIDTH	DIM "B" =	"
	HEATER GAP	DIM "C" =	"
	HEATER DIAMETER	DIM "D" =	"

**NOTES**

- (1) Termination can be Lead Wires or Post Terminals. (Specify location)
- (2) Straps are 5/8" wide with 10-24 B/N unless specified.
- (3) Number of straps is to be specified by customer
- (4) Can be made as **TWO PIECE** construction

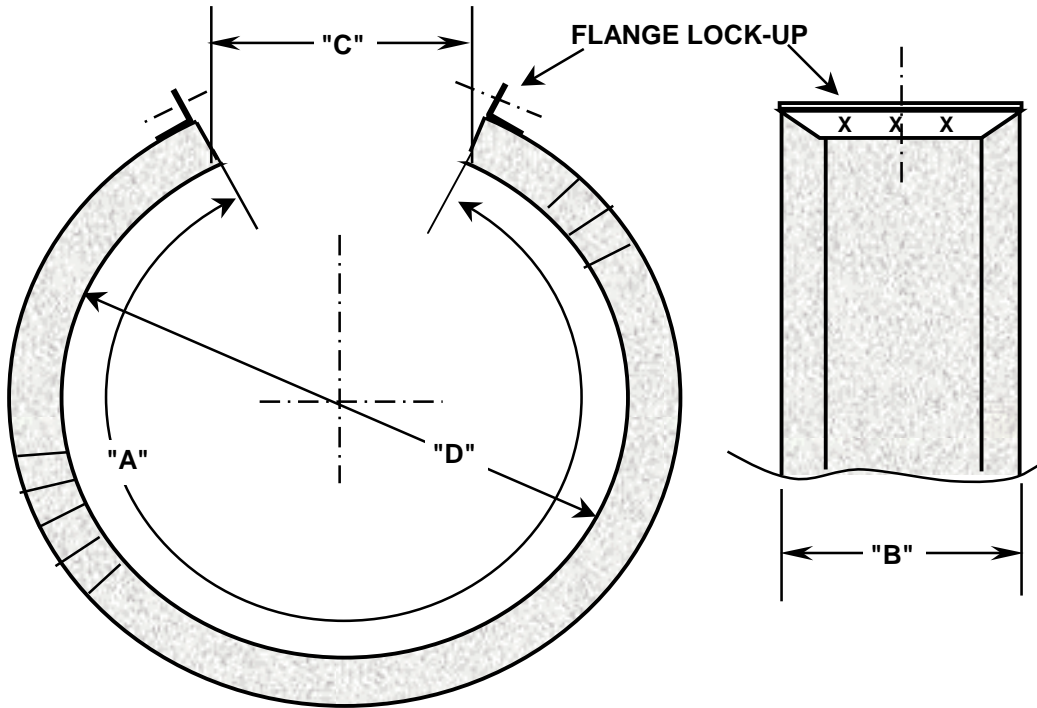


MEASURING PARTIAL COVERAGE BANDS

**CERAMIC BANDS**

ONE PIECE CONSTRUCTION

FLANGE LOCK-UP



<b>OR</b>	HEATER COVERAGE	DIM "A" =	0
	HEATER WIDTH	DIM "B" =	"
	HEATER GAP	DIM "C" =	"
	HEATER DIAMETER	DIM "D" =	"

**NOTES**

- (1) Termination can be Lead Wires or Post Terminals. (Specify location)
- (2) Flange size to be **Specified** by customer
- (3) Number, location and size of **flange** holes is to be **specified** by customer
- (4) Can be made as **TWO PIECE** construction

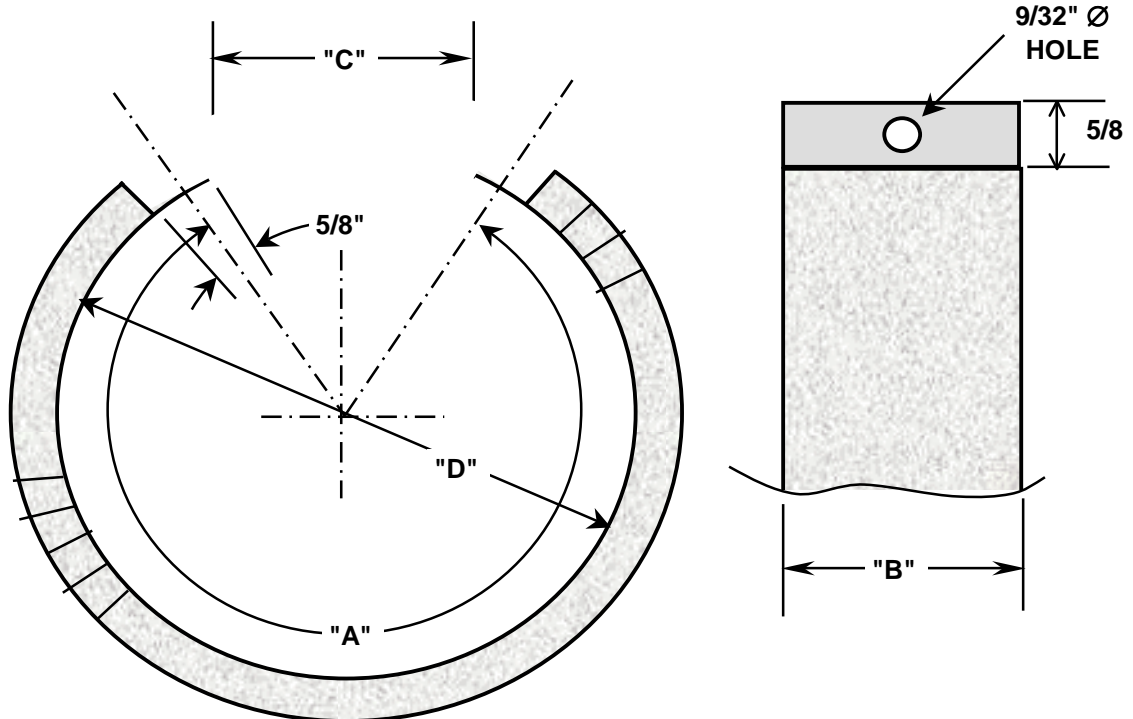


MEASURING PARTIAL COVERAGE BANDS

**CERAMIC BANDS**

**ONE PIECE CONSTRUCTION**

**TAB LOCK-UP**



<b>OR</b>	HEATER COVERAGE	DIM "A" =	0
	HEATER WIDTH	DIM "B" =	"
	HEATER GAP	DIM "C" =	"
	HEATER DIAMETER	DIM "D" =	"

**NOTES**

- (1) Termination can be Lead Wires or Post Terminals. (Specify location)
- (2) Tab size to be **Specified** by customer
- (3) Number, location and size of **TAB** holes is to be **specified** by customer
- (4) Can be made as **TWO PIECE** construction

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