

POLYIMIDE FILM INSULATED FLEXIBLE HEATERS



KHRA/KHLVA/KHA Series



- ✓ Rated Up to 150°C (302°F)
- ✓ Etched Foil Design
- ✓ 0.010" Max Thickness
- ✓ 2.5, 5, or 10 Watts/in²
- ✓ 115, 230[†] and 28V
- ✓ Optional Pressure-Sensitive Adhesive (PSA)

Specifications

Operating Temperature:

-57 to 150°C (-70 to 302°F) for heaters without pressure sensitive adhesive (PSA). Operating temperature for heaters with sensitive adhesive is -40 to 149°C (-40 to 300°F)

Maximum Thickness: 0.010" except at lead wire exit

Wattage: 2.5, 5 or 10 W/in²

Leads: PTFE insulated (UL 1180), 12" (305 mm) long (wire gauge varies with heater). For strain relief, a silicone patch has been added to heaters.

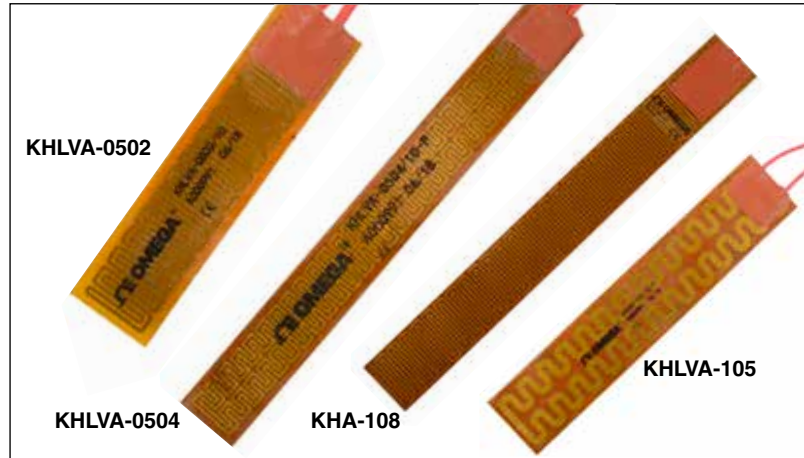
Dielectric Strength: 1250 Vac

Minimum Bending Radius: 0.032"

[†] Most sizes available in 230V.

Consult heaters sales and engineering. If you require custom specifications of a insulated flexible heater, please contact our custom engineering team.

KHLVA Series, Rectangular, 28 Volts



Smaller than actual size

Polyimide film insulated heaters are available in a variety of shapes, sizes, and wattages. Wattage ratings are 2.5, 5, or 10 W/in² at 115, 230[†] or 28V

Polyimide film offers a high degree of resistance to chemicals. Flexible nature can fit into intrinsic voids & can be applied very Easily.

KHRA Series, Round, 115 Volts

To Order				
Without PSA Model No.	With PSA Model No.	Diameter in (cm)	Total Wattage for Watt Density	
			5 W/in ²	10 W/in ²
KHRA-2/(*)	KHRA-2/(*)-P	2 (5.08)	—	31.4
KHRA-3/(*)	KHRA-3/(*)-P	3 (7.62)	35.3	70.7
KHRA-4/(*)	KHRA-4/(*)-P	4 (10.16)	62.8	126
KHRA-5/(*)	KHRA-5/(*)-P	5 (12.7)	98.2	196
KHRA-6/(*)	KHRA-6/(*)-P	6 (15.24)	141	283
KHRA-8/(*)	KHRA-8/(*)-P	8 (20.32)	251	503
KHRA-10/(*)	KHRA-10/(*)-P	10 (25.4)	393	785
KHRA-12/(*)	KHRA-12/(*)-P	12 (30.48)	565	1131

Comes complete with operator's manual.

* Insert watt density: "2" for 2.5 W/in², "5" for 5 W/in² or "10" for 10 W/in².

Note: Heaters are available in only the watt densities where total wattage is indicated.

Ordering Example: KHLVA-104/5-P, 1 x 4" (2.5 x 10 cm), 28V, 5 W/in² Polyimide film heater with PSA.

Without PSA Model No.	With PSA Model No.	Width, in (cm)	Length, in (cm)	Total Wattage for Watt Density		
				2.5 W/in ²	5 W/in ²	10 W/in ²
KHLVA-0502/(*)	KHLVA-0502/(*)-P	0.5 (1.27)	2 (5.08)	—	5	10
KHLVA-0504/(*)	KHLVA-0504/(*)-P	0.5 (1.27)	4 (10.16)	5	10	20
KHLVA-101/(*)	KHLVA-101/(*)-P	1 (2.54)	1 (2.54)	—	5	10
KHLVA-102/(*)	KHLVA-102/(*)-P	1 (2.54)	2 (5.08)	5	10	20
KHLVA-103/(*)	KHLVA-103/(*)-P	1 (2.54)	3 (7.62)	7.5	15	30
KHLVA-104/(*)	KHLVA-104/(*)-P	1 (2.54)	4 (10.16)	10	20	40
KHLVA-105/(*)	KHLVA-105/(*)-P	1 (2.54)	5 (12.7)	12.5	25	50
KHLVA-202/(*)	KHLVA-202/(*)-P	2 (5.08)	2 (5.08)	10	20	40
KHLVA-203/(*)	KHLVA-203/(*)-P	2 (5.08)	3 (7.62)	15	30	60
KHLVA-204/(*)	KHLVA-204/(*)-P	2 (5.08)	4 (10.16)	20	40	80
KHLVA-205/(*)	KHLVA-205/(*)-P	2 (5.08)	5 (12.7)	25	50	100
KHLVA-303/(*)	KHLVA-303/(*)-P	3 (7.62)	3 (7.628)	22.5	45	90



KHA Series, Rectangular, 115 Volts

To Order					
Without PSA Model No.	With PSA Model No.	Width, in (cm)	Length, in (cm)	Total Wattage for Watt Density	
				5 W/in ²	10 W/in ²
—	KHA-102/(*)-P	1 (2.54)	2 (5.08)	—	30
KHA-103/(*)	KHA-103/(*)-P	1 (2.54)	3 (7.62)	—	30
KHA-104/(*)	KHA-104/(*)-P	1 (2.54)	4 (10.16)	20	40
KHA-105/(*)	KHA-105/(*)-P	1 (2.54)	5 (12.7)	25	50
KHA-106/(*)	KHA-106/(*)-P	1 (2.54)	6 (15.24)	30	60
KHA-108/(*)	KHA-108/(*)-P	1 (2.54)	8 (20.32)	40	80
KHA-110/(*)	KHA-110/(*)-P	1 (2.54)	10 (25.4)	50	100
KHA-112/(*)	KHA-112/(*)-P	1 (2.54)	12 (30.48)	60	120
KHA-202/(*)	KHA-202/(*)-P	2 (5.08)	2 (5.08)	20	40
KHA-203/(*)	KHA-203/(*)-P	2 (5.08)	3 (7.62)	30	60
KHA-204/(*)	KHA-204/(*)-P	2 (5.08)	4 (10.16)	40	80
KHA-205/(*)	KHA-205/(*)-P	2 (5.08)	5 (12.7)	50	100
KHA-206/(*)	KHA-206/(*)-P	2 (5.08)	6 (15.24)	60	120
KHA-208/(*)	KHA-208/(*)-P	2 (5.08)	8 (20.32)	80	160
KHA-210/(*)	KHA-210/(*)-P	2 (5.08)	10 (25.4)	100	200
KHA-212/(*)	KHA-212/(*)-P	2 (5.08)	12 (30.48)	120	240
KHA-303/(*)	KHA-303/(*)-P	3 (7.62)	3 (7.62)	45	90
KHA-304/(*)	KHA-304/(*)-P	3 (7.62)	4 (10.16)	60	120
KHA-305/(*)	KHA-305/(*)-P	3 (7.62)	5 (12.7)	75	150
KHA-306/(*)	KHA-306/(*)-P	3 (7.62)	6 (15.24)	90	180
KHA-308/(*)	KHA-308/(*)-P	3 (7.62)	8 (20.32)	120	240
KHA-310/(*)	KHA-310/(*)-P	3 (7.62)	10 (25.4)	150	300
KHA-312/(*)	KHA-312/(*)-P	3 (7.62)	12 (30.48)	180	360
KHA-404/(*)	KHA-404/(*)-P	4 (10.16)	4 (10.16)	80	160
KHA-405/(*)	KHA-405/(*)-P	4 (10.16)	5 (12.7)	100	200
KHA-406/(*)	KHA-406/(*)-P	4 (10.16)	6 (15.24)	120	240
KHA-408/(*)	KHA-408/(*)-P	4 (10.16)	8 (20.32)	160	320
KHA-410/(*)	KHA-410/(*)-P	4 (10.16)	10 (25.4)	200	400
KHA-412/(*)	KHA-412/(*)-P	4 (10.16)	12 (30.48)	240	480
KHA-505/(*)	KHA-505/(*)-P	5 (12.7)	5 (12.7)	125	250
KHA-506/(*)	KHA-506/(*)-P	5 (12.7)	6 (15.24)	150	300
KHA-508/(*)	KHA-508/(*)-P	5 (12.7)	8 (20.32)	200	400
KHA-510/(*)	KHA-510/(*)-P	5 (12.7)	10 (25.4)	250	500
KHA-512/(*)	KHA-512/(*)-P	5 (12.7)	12 (30.48)	300	600
KHA-606/(*)	KHA-606/(*)-P	6 (15.24)	6 (15.24)	180	360
KHA-608/(*)	KHA-608/(*)-P	6 (15.24)	8 (20.32)	240	480
KHA-610/(*)	KHA-610/(*)-P	6 (15.24)	10 (25.4)	300	600
KHA-612/(*)	KHA-612/(*)-P	6 (15.24)	12 (30.48)	360	720
KHA-808/(*)	KHA-808/(*)-P	8 (20.32)	8 (20.32)	320	640
KHA-810/(*)	KHA-810/(*)-P	8 (20.32)	10 (25.4)	400	800
KHA-812/(*)	KHA-812/(*)-P	8 (20.32)	12 (30.48)	480	960
KHA-1010/(*)	KHA-1010/(*)-P	10 (25.4)	10 (25.4)	500	1000
KHA-1012/(*)	KHA-1012/(*)-P	10 (25.4)	12 (30.48)	600	1200
KHA-1212/(*)	KHA-1212/(*)-P	12 (30.48)	12 (30.48)	720	1440

Comes complete with operator's manual.

* Insert watt density: "2" for 2.5 W/in², "5" for 5 W/in² or "10" for 10 W/in².

Note: Heaters are available in only the watt densities where total wattage is indicated.

SIDE PAD STYLE

STANDARD LENGTH: 12
OR
WIRE LENGTH

WIDTH TO PAD

STANDARD THICKNESS: .060
OR
OUTLET THICKNESS

STANDARD THICKNESS: .010
OR
THICKNESS

WIRES: UL 1180, STRANDED,
AWG 22,
PTFE INSULATED

OPTIONAL PRESSURE SENSITIVE ADHESIVE (PSA)
3M 468MP OR EQUIVALENT
TYPICALLY 0.001" THICK

WIDTH	LENGTH	WATT DENSITY	VOLTAGE	PSA BACKING	WIDTH TO PAD	WIRE LENGTH	THICKNESS	OUTLET THICKNESS

BOTTOM PAD STYLE

STANDARD LENGTH: 12.00
OR
WIRE LENGTH

STANDARD THICKNESS: .060
OR
OUTLET THICKNESS

STANDARD THICKNESS: .010
OR
THICKNESS

WIRES: UL 1180, STRANDED,
AWG 22,
PTFE INSULATED

OPTIONAL PRESSURE SENSITIVE ADHESIVE (PSA)
3M 468MP OR EQUIVALENT
TYPICALLY 0.001" THICK

WIDTH	LENGTH	WATT DENSITY	VOLTAGE	PSA BACKING	LENGTH TO PAD	WIRE LENGTH	THICKNESS	OUTLET THICKNESS

CIRCLE STYLE

STANDARD THICKNESS: .060
OR
OUTLET THICKNESS

STANDARD THICKNESS: .010
OR
THICKNESS

STANDARD LENGTH: 12
OR
WIRE LENGTH

WIRES: UL 1180, STRANDED,
AWG 22,
PTFE INSULATED

OPTIONAL PRESSURE SENSITIVE ADHESIVE (PSA)
3M 468MP OR EQUIVALENT
TYPICALLY 0.001" THICK

Ø DIAMETER

DIAMETER	WATT DENSITY	VOLTAGE	PSA BACKING	WIRE LENGTH	THICKNESS	OUTLET THICKNESS

Fill this form with details required to quote this heater.
Scan & email this Form to heaters@omega.com

If you have specific geometry requirements, you may also create and attach your own drawing.

Minimum order of \$1000

NOTES:

- CONSTRUCTION: POLYIMIDE MATERIAL ENCASING AN INCONEL 600 RESISTIVE FOIL ELEMENT
- OPERATING TEMP (WITHOUT PSA): -57°C TO 150°C
OPERATING TEMP (WITH PSA): -40°C TO 149°C
- MINIMUM BENDING RADIUS: 0.032"
- DIELECTRIC STRENGTH: 1250 VAC FOR 1 SEC
- WATT DENSITY TOLERANCE: ±10%

Ω OMEGA™		
TITLE: POLYIMIDE CUSTOM HEATER		
SIZE: B	TEMPLATE NO.: 080-0012	REV: C

CUSTOM POLYIMIDE HEATER QUOTATION FORM

Tel:

E-mail

Name: _____

Company: _____

Address: _____

State/Province: _____ Zip/Postal Code: _____

Phone: _____ E-mail: _____ Fax: _____

- 1) What is the application? _____
- 2) Material to be heated: _____
- 3) Quantity required? _____
- 4) Will this be a one-time order or recurring order? _____
- 5) Other instrumentation to be quoted: _____
- 6) Testing or other required documentation: _____
- 7) Lead-time constrained: _____

All custom heaters are non-returnable and PO cannot be canceled.

FILL Dimensional sketch from reverse side