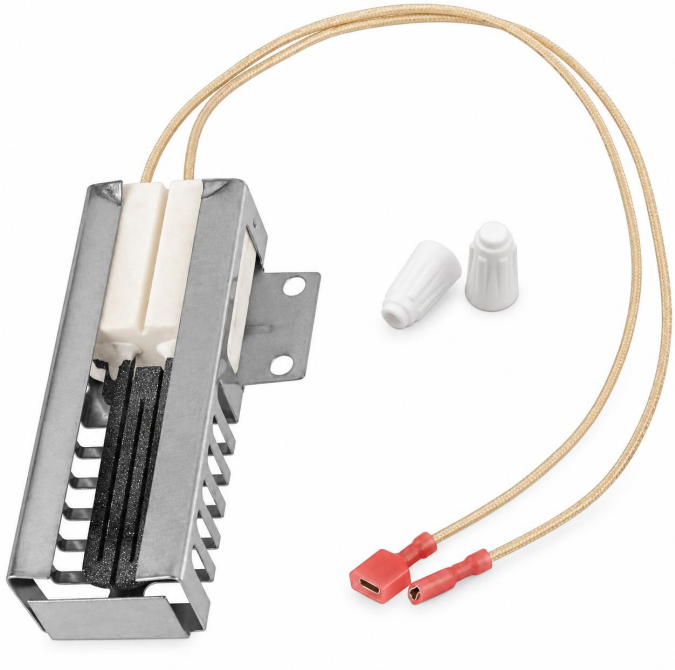
ADCERAX
ADVANCED CERAMICS

GAS OVENS & RANGES / PRODUCT CATALOG

Silicon Carbide Oven Igniters

Assembly configurations & custom project options



Featured configuration: vented channel assembly with individual terminals. Pictured accessories are specified separately.

Compare seven pictured configurations, identify the mounting and wiring details your oven needs, and define a custom assembly for engineering review.

FIND YOUR STARTING POINT	PAGE
Product configurations	2–3
Bake & broil applications	4
Custom assembly options	5
Flat & spiral dimension inputs	6–7
Electrical & acceptance requirements	8
Send your part or drawing	9

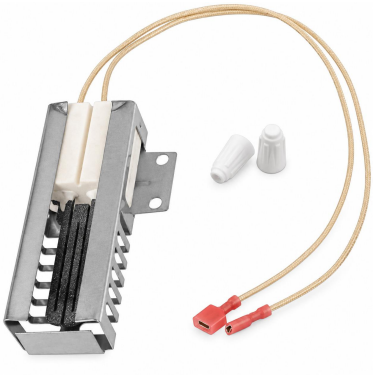
ADCERAX | China-based advanced ceramics manufacturer for custom precision ceramic components.

A configuration and custom-project guide. Final specifications and supply scope follow the agreed drawing and quotation.

01 / PRODUCT CONFIGURATIONS

Start with the mounting arrangement

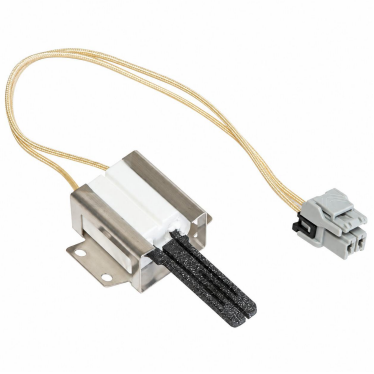
A channel, side flange or broad plate changes how the igniter sits beside the burner. Compare these visible constructions with your existing part or new oven layout.



01 Vented channel with terminal leads

A flat, slotted element sits inside a vented metal channel. A side flange provides two visible fixing holes; the leads end in individual insulated terminals.

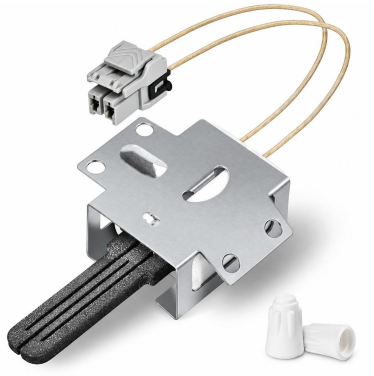
Compare: Channel envelope, flange position and terminal interface.



02 Side-flange plug assembly

The flat element projects beyond a compact metal holder and ceramic body. The side flange and keyed plug define separate mounting and wiring interfaces.

Compare: Element projection, flange orientation and mating plug.



03 Broad mounting-plate assembly

A formed mounting plate surrounds the ceramic body, with the flat element projecting beyond it and insulated leads connected to a plug.

Compare: Plate outline, fixing pattern and installed clearances.

References 01–07 identify these photos, not orderable part numbers or approved OEM replacements. Availability and the exact configuration are confirmed after project review.

Choose the element and connection

The connection end and element form are part of the assembly specification. Record them with the bracket and ceramic holder, rather than selecting from overall length alone.



04 Spiral element with terminal leads

A cylindrical spiral element is carried within a vented metal channel, with a ceramic holder and individual insulated terminals.

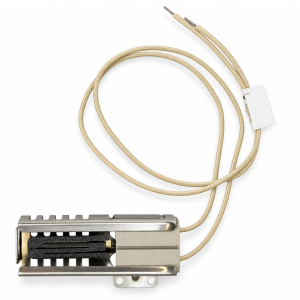
Compare: Element diameter, channel orientation and terminal requirements.



05 Flat element with exposed lead ends

A flat element and ceramic holder sit within an elongated vented channel; the insulated leads have exposed ends.

Compare: Required lead length and the specified termination method.



06 Channel assembly with side lug

A side mounting lug changes the fixing location relative to the channel. Looped insulated leads terminate in exposed tips.

Compare: Lug position, fixing holes and lead routing.



07 Channel assembly with keyed plug

A vented bracket, flat element and ceramic holder are combined with insulated leads ending in a keyed connector.

Compare: Connector face, keying and bracket orientation.

Photos show visible form only. They do not establish electrical ratings or interchangeability. Any loose connection caps or other accessories must be named in the quoted bill of materials.

02 / APPLICATIONS

For the gas burner inside your oven

Use these configurations as starting references for gas ovens and ranges that specify silicon carbide hot surface ignition. Identify the exact burner position and appliance version before choosing a configuration.

BURNER POSITION	WHAT MAKES THE ASSEMBLY SPECIFIC
Bake burner	The lower baking-burner location, mounting face, element position and route from the igniter to the appliance harness.
Broil burner, where fitted	The separate gas broiling-burner location and its own bracket, wiring route and control requirements. Keep its part reference separate from the bake igniter.

Why the assembly details matter

01 Place the element where your burner needs it

A side flange, channel or plate establishes a different mounting reference. Reviewing that interface together with the element position helps identify an otherwise similar part that would sit in the wrong place.

02 Define the connection to your harness

Keyed plugs, individual terminals and exposed leads need different connection details. Specify the required interface and routing as part of the assembly, before a sample is evaluated.

03 Make the complete part easier to specify

Keep the element, ceramic holder, metal support and leads under one assembly reference. Name any separate caps or mounting accessories so purchasing can compare the same supplied scope.

Replacement sourcing or a new oven design

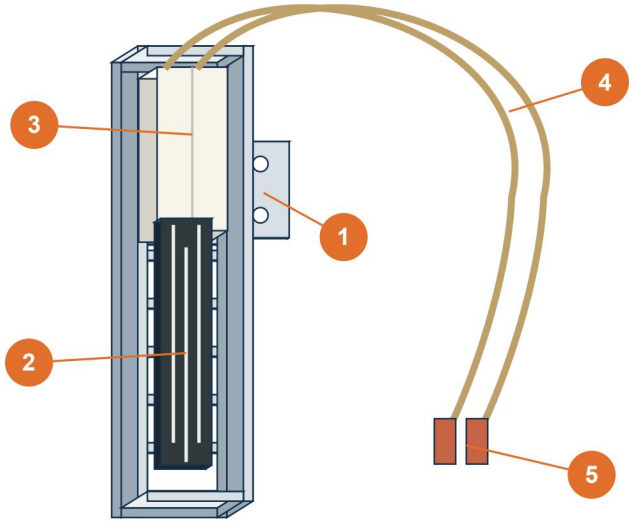
For an existing part, begin with its label, complete oven model and clear photos. For a new appliance, begin with the burner layout, assembly drawing and control requirements. Both routes lead to review of the same mechanical and electrical interfaces.

Bake and broil positions are application categories, not a compatibility list. The appliance specification and system evaluation govern final selection.

03 / CUSTOM ASSEMBLIES

Customize the details that define fit

Start with one of the pictured configurations, your own part or an assembly drawing. Mark what should stay the same and what needs to change for your oven design.



1 Mounting bracket
Fixing pattern and installed orientation

2 Element geometry
Flat or spiral form; position beside burner

3 Ceramic holder
Body profile and support interface

4 Insulated leads
Usable length, routing and environment

5 Connection end
Plug keying or individual terminals

Assembly customization reference • Illustrative channel layout; not to scale. Numbers identify discussion areas, not selectable stock options.

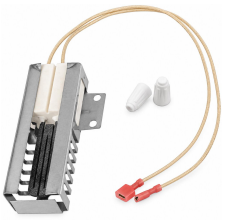
AREA	DEFINE FOR YOUR PROJECT	PURPOSE
1 Bracket	Mounting face, fixing pattern, flange or lug orientation.	Position the assembly within the available space.
2 Element	Flat or spiral form, projection and required ignition-zone location.	Align the element with the burner design.
3 Holder	Ceramic body profile, support surfaces and mating features.	Define how the element is located and supported.
4 Leads	Usable length, routing, insulation and local temperature requirements.	Reach the harness along the intended route.
5 Connection	Plug reference and keying, terminal type or required lead-end condition.	Specify the mating electrical interface.

Custom combinations are assessed against the drawing and operating requirements. Feasibility, sample scope and final supplied components are confirmed for the project.

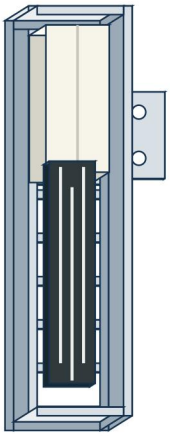
04 / CUSTOM DIMENSION INPUTS

Flat-element channel assembly

Use reference 01 to identify the rigid envelope and exposed element. For plate, flange or lug variants, send the actual assembly drawing as well; their interfaces are not defined by this channel example.

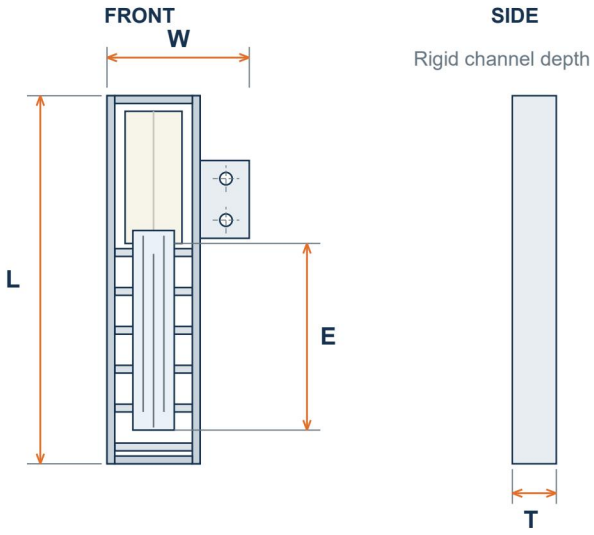


3D RECOGNITION



Channel assembly; flexible leads omitted

GOVERNING ENVELOPE VIEWS



Dimension key — not to scale; not a manufacturing or inspection drawing. Exact geometry and tolerances follow the agreed drawing.

KEY	CUSTOM INPUT — STATE mm OR in	MEASUREMENT REFERENCE
L	Overall rigid length	End-to-end rigid channel envelope; exclude flexible leads and loose accessories.
W	Overall rigid width	Maximum width across the channel and its side flange in the front view.
T	Overall rigid depth	Maximum rigid depth shown in the side view.
E	Exposed element length	Ceramic holder exit face to element tip. This is not the active ignition-zone length.

With your drawing, include the mounting face, hole pattern, flange or lug position, element width and thickness, holder profile and critical tolerances. Locate the ignition zone relative to the mounting datum and burner.

Customer-specified inputs, not published size limits. Identify drawing units and revision.

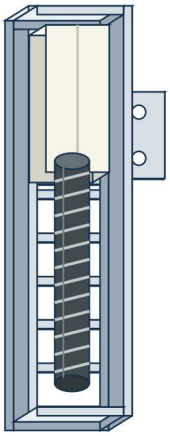
04 / CUSTOM DIMENSION INPUTS

Spiral-element channel assembly

Reference 04 has a cylindrical spiral element within a metal channel. Define the element diameter separately from the channel width and depth; a flat-element outline does not describe this form.

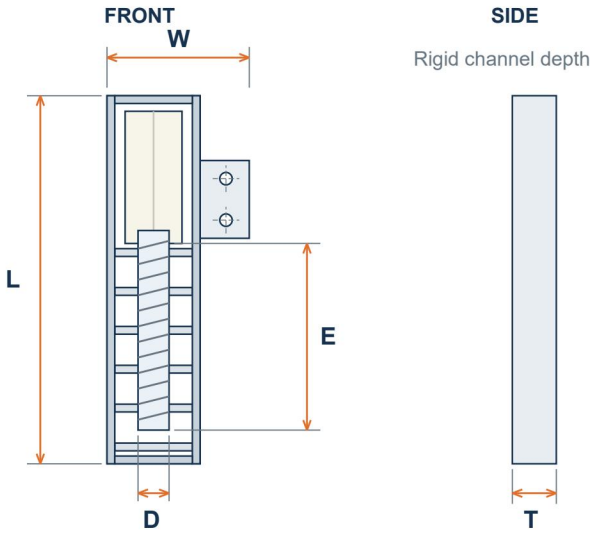


3D RECOGNITION



Channel assembly; flexible leads omitted

GOVERNING ENVELOPE VIEWS



Dimension key — not to scale; not a manufacturing or inspection drawing. Groove geometry and mounting interfaces are drawing-defined.

KEY	CUSTOM INPUT — STATE mm OR in	MEASUREMENT REFERENCE
L	Overall rigid length	End-to-end rigid channel envelope; exclude flexible leads and loose accessories.
W	Overall rigid width	Maximum width across the channel and side flange shown in the front view.
T	Overall rigid depth	Maximum rigid depth shown in the side view.
E	Exposed element length	Ceramic holder exit face to element tip; define the active ignition zone separately.
D	Element outside diameter	Outside envelope of the cylindrical element, excluding the holder and channel.

Include the actual holder and fixing details, element profile, critical tolerances and installed burner relationship. No groove pitch, standard diameter or interchangeability is implied by this illustration.

Before sample approval

Start with the information you have. Before sample approval, agree the applicable operating conditions, measurement methods and acceptance limits with the responsible engineering parties. Mark unknown requirements for follow-up.

ENGINEERING INPUT	CONDITIONS TO AGREE
Supply, current and power	Voltage at the igniter terminals (V), AC/DC, frequency (Hz) and waveform; start-up and operating current (A) and power (W), with operating state, measurement basis and allowed range. Do not infer hot operating power from cold resistance alone.
Resistance and heat-up	Cold resistance (Ω), allowed range, measurement temperature (°C), conditioning, method, test current and test points. Where required, define hot resistance or the resistance-temperature curve R(T). Specify the heat-up target, time (s), supply, airflow and measurement method.
Ignition system and environment	Complete appliance, controller and valve references; bake or broil position; fuel and specified supply pressure; burner relationship, energizing/valve timing, flame confirmation, retry and lockout. Include local temperatures, contamination and heating/cooling duty. Match series-valve current requirements where applicable.
Insulation, protection and durability	Applicable insulation, leakage, withstand and fault-protection requirements, with hot/cold test conditions. Define the cycling or life target, cycle profile, sample quantity and failure criteria. Agree the testing and acceptance scope for the quoted assembly.
Leads, connection and traceability	Lead length between agreed endpoints, routing, strain relief, insulation and mating interface. Identify assembly drawing and bill of materials (BOM) revisions, included components and the process for reviewing changes.

Record the sample acceptance basis

CHECK	RECORD BEFORE APPROVAL
Fit and supplied scope	Drawing and BOM revisions; mounting and burner-position checks; included parts, quantities and critical tolerances.
Evaluation and release	Methods, operating conditions, allowed ranges, sampling, failure criteria, required records and the parties responsible for testing and approval.
Repeat orders and packing	Accepted drawing, electrical specification and BOM revision; batch identification, protection of the element/leads, packing and change-review requirements.

Use the companion Engineering Confirmation Sheet, ADC-ENG-SIC-OI-001 Rev 02, for the detailed record. These are customer inputs, not product ratings or a statement that testing has been completed. Test and document scope require agreement.

06 / REQUEST A QUOTATION

Send the part you need to match

Start with a clear photo or drawing, the oven model, bake or broil position, quantity and delivery country. Send what you know now; complete the engineering inputs on page 8 before sample approval.

EXISTING PART OR PHOTO REFERENCE	NEW OR MODIFIED ASSEMBLY
Original part number and complete oven/range model, including suffix, market/region and applicable year or serial-number range, where available. Bake or broil position Photos of the complete part, mounting and connector Catalog photo reference 01–07, if helpful	Drawing or marked photo showing the changes Drawing number, revision and units; BOM revision if available Required element, holder, bracket and lead arrangement Burner layout and control requirements

Add details as the project is defined

INPUT	WHAT TO INCLUDE
Geometry and materials	Dimensions from pages 6–7 where relevant, actual mounting details and tolerances; specified element/holder material or original-part reference.
Electrical requirements	Supply, current and power; controller/valve references; cold/hot resistance and heat-up requirements, where known. Agree the conditions on page 8 before sample approval.
Supplied components	Lead length and connection reference; bracket, holder and any separate caps or accessories to include.
Sample and order needs	Initial quantity and delivery country; sample quantity, expected repeat demand and target date when known.
Acceptance and documents	Sample evaluation, requested inspection/compliance records, identification and packaging requirements.

What happens after you send it?

ADCERAX reviews the requested configuration and identifies any information needed for feasibility assessment. The quotation can then define the agreed part, included components, sample or order quantity, price, minimum quantity and delivery terms.

Send your drawing or part photos for review

info@adcerax.com

Contact ADCERAX - send your project details

ADCERAX | HUNAN ATCERA CO.,LTD

Catalog reference: ADC-CAT-SIC-OI-001 · Rev 02
Final specifications, sample availability and commercial terms are confirmed for the quoted configuration.