

From product development and throughout the entire product life cycle, CAPS Expert is the essential decision support tool for selecting components and suppliers! CAPS Expert is the world's most comprehensive source of information on semiconductors, passives, connectors and electromechanicals and Mil Spec cylindrical connectors.

- To Start:**
1. Select your Desktop login link  
**OR**  
Go to <http://www.ihs.com>, click the Login button, enter your user name and password, and click the Submit button.
  2. Click *CAPS Expert*.

**To Exit:** Click the Logout button.

**For Help:** Click the Help button. For additional assistance, contact **IHS Customer Support:**  
1-800-447-3352 (USA/Canada)  
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## Search Screen

## Standard Search

Describe the part you need, then click the Search button.

- (a) Part Number** - Type a manufacturer's part number, partial part number (see *Search Type* below), or several part numbers. Separate part numbers with commas.
- (b) Search Type** - Indicate if the part you need Begins With, Contains or is an Exact Match with the numbers(s) you typed in the Part Number field.
- (c) Manufacturer** - Narrow your search to parts from a single manufacturer.
- (d) Status Filter** - Choose All Parts or Exclude Discontinued Parts.
- (e) Device Type** - Search *All* databases or only:
  - **Semiconductors** - Integrated circuits, discrete semiconductors and optoelectronic devices.
  - **Passives** - Resistors, capacitors and inductors.
  - **Connectors and Electromechanical** - Printed Circuit Board (PCB) mounted connectors, accessories, IC sockets and switches.
  - **Mil-Spec Cylindrical Connectors** - Heavy-duty cylindrical connectors and accessory components.

Note: Your subscription may not include all databases.

- (f) Keyword** - Type descriptive words. Put a space between words for AND searches; a comma or semicolon for OR searches. Keywords are derived from device category names, family names and functions.

## Advanced Search

**Document Search** - Finds datasheets, end-of-life notices and other documents. by manufacturer name or keyword, and then links to details on parts covered in the documents.

**Parametric Search** - Find parts that have the characteristics you specify. See pages 3 and 4 of this Tip Sheet for details.

**Parametric from Picture Search** - Searches the *Connectors and Electromechanicals* database. Select a picture of the device, and then proceed with a Parametric Search to find devices with the characteristics you need.

**Logo Search** - Search for a manufacturer profile (name, address, phone number, Web site address) by selecting a manufacturer's logo.

**Manufacturer Info Search** - Search by a manufacturer's name to find its addresses, phone number and Web site.



## Part Number Search Results

In this example we searched for part number SNJ55189 and retrieved the following results list:

Click the checkboxes to select parts, then the Compare button to view parameters side-by-side.

Click the Mfr PN (Part Number) to view Device Details.

Click the Manufacturer name links to view addresses, phone numbers and Web sites.

COMPARE		Click up to 10 checkboxes below to select parts for a side-by-side comparison of part attributes.			ADD PART TO DATABASE	FEEDBACK		
Search Results		1-11 of 11 devices			NEW SEARCH			
Compare	Mfr P/N	Description	Manufacturer	Status	Data Sheet	Other Docs	X-Ref	Price & Avail
<input type="checkbox"/>	<a href="#">SNJ55189AJ</a>	LINE RECEIVER, QUAD, BIPOLAR, SINGLE-ENDED, DIP, 14PIN, CERAMIC	<a href="#">Texas Instruments Inc</a>	Active				
<input type="checkbox"/>	<a href="#">SNJ55189J</a>	LINE RECEIVER, QUAD, BIPOLAR, SINGLE-ENDED, DIP, 14PIN, CERAMIC	<a href="#">Texas Instruments Inc</a>	Discontinued				
<input type="checkbox"/>	<a href="#">5962-8688801CA</a>	LINE RECEIVER, QUAD, BIPOLAR, SINGLE-ENDED, DIP, 14PIN, CERAMIC	<a href="#">Defense Supply Center Columbus (SMD Drawings)</a>	Active				
<input type="checkbox"/>	<a href="#">5962-8688802CA</a>	LINE RECEIVER, QUAD, BIPOLAR, SINGLE-ENDED, DIP, 14PIN, CERAMIC	<a href="#">Defense Supply Center Columbus (SMD Drawings)</a>	Active				
<input type="checkbox"/>	<a href="#">5962-8688802DA</a>	LINE RECEIVER, QUAD, BIPOLAR, SINGLE-ENDED, FP, 14PIN, CERAMIC	<a href="#">Defense Supply Center Columbus (SMD Drawings)</a>	Active				
<input type="checkbox"/>	<a href="#">SNJ55189AVV</a>	LINE RECEIVER, QUAD, BIPOLAR, SINGLE-ENDED, FP, 14PIN, CERAMIC	<a href="#">Texas Instruments Inc</a>	Active				
<input type="checkbox"/>	<a href="#">SNJ55189W</a>	LINE RECEIVER, QUAD, BIPOLAR, SINGLE-ENDED, FP, 14PIN, CERAMIC	<a href="#">Texas Instruments Inc</a>	Contact Mfr				

Click:

(Datasheet icons) - to view current datasheets.

(Other Docs icons) - to view historical datasheets, change notices, application notes, end of life notices, etc.

(X-Ref icons) - to view direct replacements, upgrades and downgrades.

(Price & Avail icons) - to view pricing and availability information. If you are registered on the FreeTrade Zone (www.freetradezone.com), you will be taken directly to a list of possible suppliers.

## Device Details (Single-Part Display)

Click the parameter names for a definition of the information contained in each row of the display.

View datasheets, revision history application notes or end-of-life notices.

Initiate a Parametric Search for similar parts.

Check price and availability on supplier Web sites.

View the package drawing in Drawing Web Format (DWF). Download a free copy of the Autodesk WHIP!® viewer by clicking the WHIP! icon.

Device Details		Category: Line Receiver		NEW SEARCH
<b>Part Number:</b>	SNJ55189AJ	<a href="#">Datasheet</a>	<a href="#">Datasheet Revision History</a>	
<b>Documents:</b>				
<b>Replacements:</b>				
<b>QBE Parametric Search:</b>	<input type="text" value="GO"/>			
<b>Manufacturer:</b>	<a href="#">Texas Instruments Inc</a>			
<b>Price &amp; Availability:</b>				
<b>Status:</b>	Active			
<b>Technology:</b>	BIPOLAR			
<b># Receivers:</b>	4			
<b>Receiver Type:</b>	SINGLE-ENDED			
<b>Package Equivalence Code:</b>	<a href="#">DIP14..3</a>			
<b>Package Style:</b>	DIP			
<b>Package Material:</b>	CERAMIC			
<b># Pins:</b>	14			

## Datasheet Revision History

Click the icons in the first column to open the datasheets (PDF format) in the Adobe Acrobat® Reader™.

View	Document Title	Publication Date	Manufacturer	View Related Part(s)
	MC1489/MC1489A/SN55189/SN55189A/SN75189/SN75189A Quadruple Line Receivers	Oct 1, 1998	<a href="#">Texas Instruments Inc</a>	
	MC1489/1489A, SN55189A, SN75189/189A	May 1, 1993	<a href="#">Texas Instruments Inc</a>	
	SN55189, SN55189A, SN75189, SN75189A	Jan 1, 1991	<a href="#">Texas Instruments Inc</a>	

Click the icons in the last column to view a list of related parts.

# Parametric Search

## Step One:

### Select a Category

Select a category from the list, or enter category words and click the Search button to locate the category.

Category words: <input type="text"/>	<b>SEARCH</b> Click to search the categories using a word or phrase in the field.	<b>NEW SEARCH</b>		
Amplifier ▶	Crystal Oscillator	Inductor ▶	Phase-Locked Loop	Stereo/Audio
Analog Miscellaneous	Data Acquisition System	Interface Miscellaneous	Power Supply ▶	Switch IC ▶
Automotive Circuit	Delay Line	LED ▶	Power Supply Miscellaneous	Switch ▶
Battery	Detector Miscellaneous	Line Receiver	Prescaler	Telecomm/Datacomm ▶
Capacitor ▶	Digital Signal Processor	Line Transceiver	Processor Miscellaneous	Thyristor ▶
Circuit Protection Devices	Diode ▶	Logic ▶	Programmable Logic ▶	Timer
Clock Generator	Display ▶	Memory ▶	RF Connector	Transformer
CODEC ▶	Display Module ▶	Microcontroller	Radio Receiver Circuit	Transistor ▶
Communication Miscellaneous	Driver ▶	Microprocessor	Relay (Solid-State)	TV/Video Circuit
Connector ▶	Fan/Blower ▶	Mil Cylindrical Connector/Acc	Relay ▶	Variistor Transient Suppressor
Connector Accessory ▶	Filter ▶	Multiplexer (Analog)	Resistor ▶	Voltage Comparator
Consumer Miscellaneous	Frequency Synthesizer	Optocoupler ▶	Sensor ▶	Voltage Detector
Controller Miscellaneous	Fuse	Optoelectronic Miscellaneous ▶	SMPS Controller	Voltage Follower
Converter ▶	Heat Sink	Oscillator	Signal Conditioner ▶	Voltage Reference
Crystal	I.C. Socket ▶	Peripheral Miscellaneous ▶	Speech Circuit	Voltage Regulator

## Step Two:

### Select Parameters

The drop-down menu contains a list of the parameters for this category.

Notice that the number of devices found is displayed in the Results frame.

<b>CATEGORY</b> Click to select a new category.	<b>DISPLAY RESULTS</b> Click to display the search results.	<b>NEW SEARCH</b>
<b>Category: Line Receiver</b>	<b>Results</b> 2,696 devices found for your query.	
Click on a parameter to display values and refine the query.		
Manufacturer		
Status		
# Receivers		
Max I(ol) (A)		
Max Oper Temp (°C)		
Max Receive Delay (s)		
Max Supply Current (A)		
Max V(cm) (V)		

Click an item in the drop-down list to display the list of possible values.

Click the checkboxes to select the values to use in your search, and then click the Select button.

Continue selecting parameters and values until you have defined the part you need.

<b>CATEGORY</b> Click to select a new category.	<b>SELECT</b> Click to select the parameter values specified using the list below.	<b>EXIT</b> Click to exit this value selection and return to the parametric query.	<b>NEW SEARCH</b>
<b>Category: Line Receiver</b>	<b>Select</b> <u>Manufacturer</u>		
Click on a parameter to display values and refine the query.	<input type="checkbox"/> Raytheon, Raytheon Semiconductor Division		
	<input type="checkbox"/> Rochester Electronics Inc		
	<input type="checkbox"/> Samsung Electronics Inc		
	<input type="checkbox"/> SGS-Ates Componenti Elettronici S P A		
	<input type="checkbox"/> Sipex Corp		
	<input type="checkbox"/> Sony Corp		
	<input type="checkbox"/> Sprague Electric Co		
	<input type="checkbox"/> ST Microelectronics		
	<input type="checkbox"/> Startech Semiconductor Inc		
	<input type="checkbox"/> Synergy Semiconductor Corp		
	<input checked="" type="checkbox"/> Texas Instruments Inc		

## Step Three:

### Display Results

After selecting the parameters and values you need, click the Display Results button to see a list of the parts that meet this criteria.

<b>CATEGORY</b> Click to select a new category.	<b>DISPLAY RESULTS</b> Click to display the search results for the parameters selected below.	<b>REMOVE/MODIFY</b> Click to remove or modify values selected with the checkboxes	<b>NEW SEARCH</b>
<b>Category: Line Receiver</b>	<b>Results</b> 35 devices found for your query.		
Click on a parameter to display values and refine the query.	<b>Remove Parameter</b>	<b>Value</b>	
Manufacturer	<input type="checkbox"/> Manufacturer	Texas Instruments Inc	
Status	<input type="checkbox"/> Status	Active	
# Receivers	<input type="checkbox"/> # Receivers	4	
Max I(ol) (A)	<input type="checkbox"/> Technology	BIPOLAR	
Max Oper Temp (°C)			
Max Receive Delay (s)			
Max Supply Current (A)			
Max V(cm) (V)			

## Step Four: Analyze Results

View various parameter groups.

Click the checkboxes to select parts, then the Compare button to view parameters side-by-side.

Parametric search results are displayed in the table below. Click on the group name link to view related parameters. [RETURN TO PARAMETRIC SEARCH](#) Click to return to the previously defined parametric search values. [NEW SEARCH](#)

**Parametric Results** 1-25 of 35 devices [NEXT](#) [COMPARE](#)

[Part Info](#) [Electrical](#) [Feature/Description](#) [Timing](#) [Thermal/Power](#) [Measurement Condition](#) [Package/Pinout](#) [Quantitative](#) [Reliability](#) [Source/Info](#) [Tolerance](#) [All](#)

**Category: Line Receiver**

Compare	Part Number	OBE Search	Status	Manufacturer	Description
<input checked="" type="checkbox"/>	<a href="#">SNJ55173J</a>	<a href="#">GO</a>	Active	<a href="#">Texas Instruments Inc</a>	LINE RECEIVER,QUAD,BIPOLAR,DIFFERENTIAL,DIP,16PIN,CERAMIC
<input checked="" type="checkbox"/>	<a href="#">SN55173J</a>	<a href="#">GO</a>	Active	<a href="#">Texas Instruments Inc</a>	LINE RECEIVER,QUAD,BIPOLAR,DIFFERENTIAL,DIP,16PIN,CERAMIC
<input checked="" type="checkbox"/>	<a href="#">SN75173N</a>	<a href="#">GO</a>	Active	<a href="#">Texas Instruments Inc</a>	LINE RECEIVER,QUAD,BIPOLAR,DIFFERENTIAL,DIP,16PIN,PLASTIC
<input type="checkbox"/>	<a href="#">MC3486N</a>	<a href="#">GO</a>	Active	<a href="#">Texas Instruments Inc</a>	LINE RECEIVER,QUAD,BIPOLAR,DIFFERENTIAL,DIP,16PIN,PLASTIC

## Step Five: Side-by-Side Comparison

Here is information on the three parts displayed side-by-side for quick comparison.

Click these links to view datasheets, application notes, end-of-life notices and other documents.

Parameters that are different than those of the first part are highlighted in color to save you research time.

View detailed pinout information.

**Line Receiver**  
Click on a **X** to remove that part from the comparison

**Value Guide:** ■ Different [NEW SEARCH](#)

Part Number:	<a href="#">SNJ55173J</a>	<a href="#">SN55173J</a> X	<a href="#">SN75173N</a> X
<b>Documents:</b>	 <a href="#">Datasheet</a> <a href="#">Datasheet Revision History</a>	<a href="#">Datasheet</a> <a href="#">Datasheet Revision History</a>	<a href="#">Datasheet</a> <a href="#">Datasheet Revision History</a>
<b>QBE Parametric Search:</b>	<a href="#">GO</a>	<a href="#">GO</a>	<a href="#">GO</a>
<b>Manufacturer:</b>	<a href="#">Texas Instruments Inc</a>	<a href="#">Texas Instruments Inc</a>	<a href="#">Texas Instruments Inc</a>
<b>Price &amp; Availability:</b>	\$	\$	\$
<b>Status:</b>	Active	Active	Active
<b>Technology:</b>	BIPOLAR	BIPOLAR	BIPOLAR
<b># Receivers:</b>	4	4	4
<b>Receiver Type:</b>	DIFFERENTIAL	DIFFERENTIAL	DIFFERENTIAL
<b>Package Equivalence Code:</b>	 <a href="#">DIP16_3</a>	<a href="#">DIP16_3</a>	<a href="#">DIP16_3</a>
<b>Package Style:</b>	DIP	DIP	DIP
<b>Package Material:</b>	CERAMIC	CERAMIC	PLASTIC
<b># Pins:</b>	<a href="#">16</a>	<a href="#">16</a>	<a href="#">16</a>
<b>Mounting Style:</b>	THRU-HOLE	THRU-HOLE	THRU-HOLE
<b>Reliability Level:</b>	38510B/34H/35Q	Comm	Comm
<b>Power Supplies (V):</b>	5	5	5
<b>Max Supply Current (A):</b>	70m	70m	70m

For more information view our demo: [www.ihs.com/procurement/caps-expert-components/demo.html](http://www.ihs.com/procurement/caps-expert-components/demo.html)

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