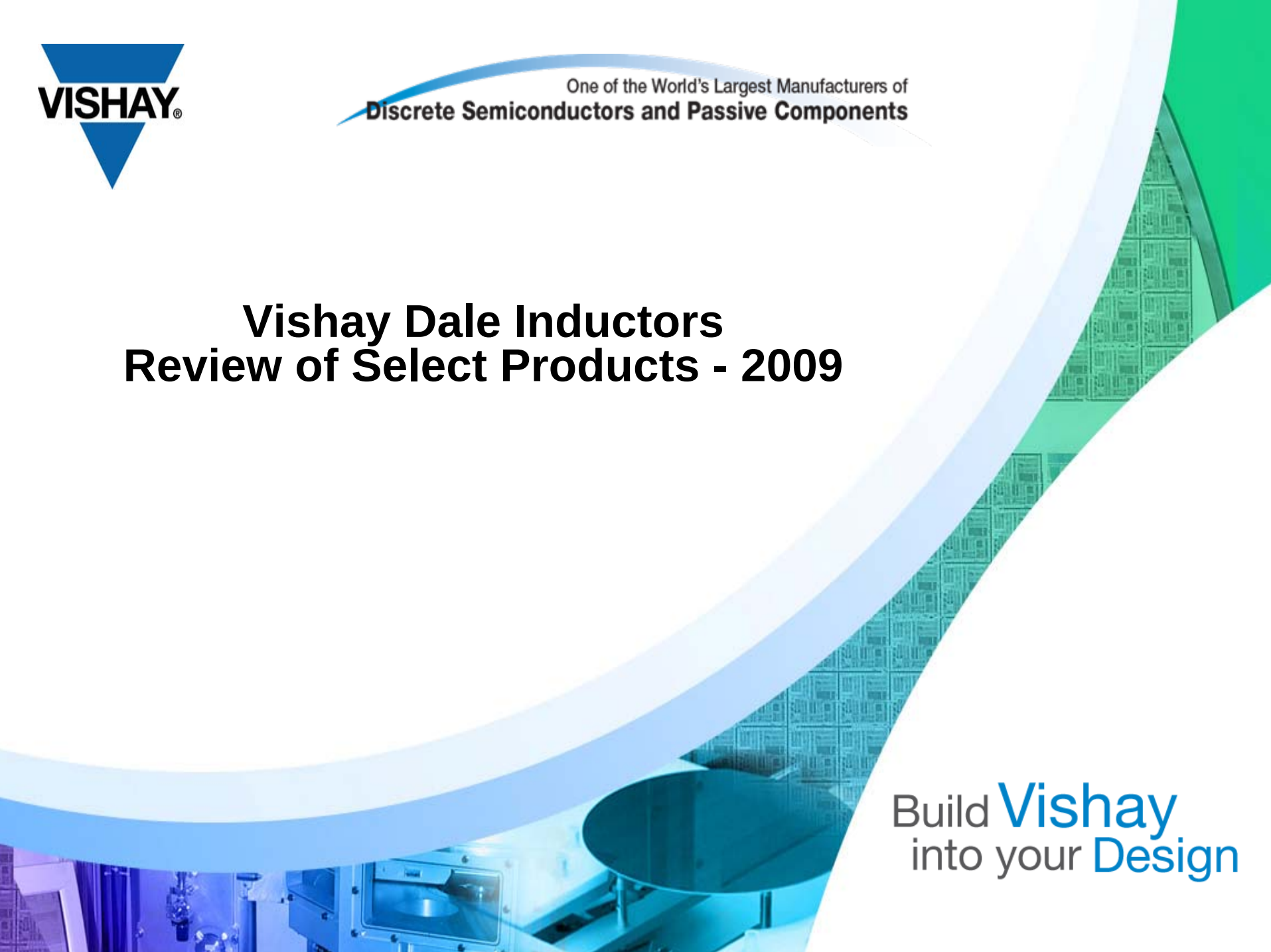
One of the World's Largest Manufacturers of
Discrete Semiconductors and Passive Components

# Vishay Dale Inductors
# Review of Select Products - 2009



Build Vishay
into your Design

# Vishay Intertechnology – Inductor Division Manufacturing Sites

Yankton, SD

Juarez, Mexico

Beersheva, Israel

QUALITY CERTIFICATIONS

- AMERICAS: QS-9000, ISO-9001, ISO-9002, ISO-14001 ISO/TS-16949, AQS-9000
  ISRAEL: QS-9000, ISO-9001, ISO-14001, ISO/TS-16949

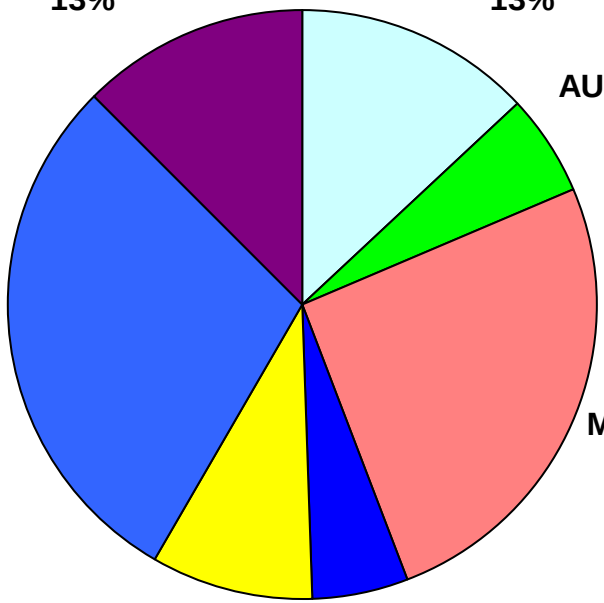
# Where We Sell our Products

CONSUMER
13%

INDUSTRIAL
13%

AUTOMOTIVE
6%

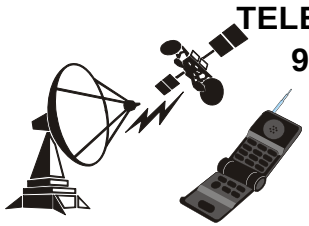
COMPUTER
29%

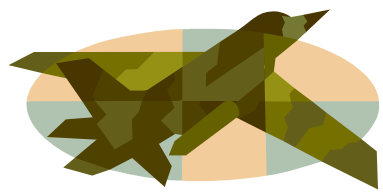


MEDICAL
25%

TELECOM
9%

AMS
5%





2008 Data

# Vishay Dale Inductors

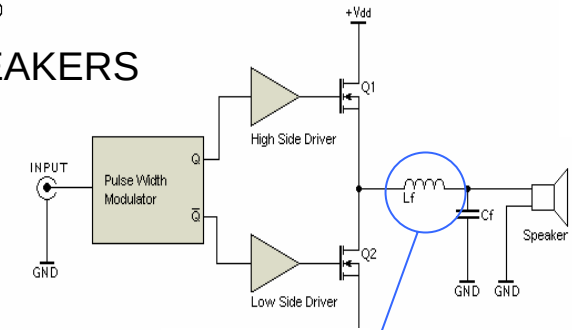
- Inductors (Two Terminals)
  - SMD Inductors
  - Leaded Inductors
  - Flux Antennas
- Transformers (3 or More Terminals)
  - SMD Transformers
  - Leaded Transformers
  - Aerospace and Military
  - Medical
- Impedance Beads
  - Single
  - Arrays
- Frequency Control
  - SMD and Leaded Crystals and Oscillators
- Connectors
  - Standard Connectors
  - Custom Connectors

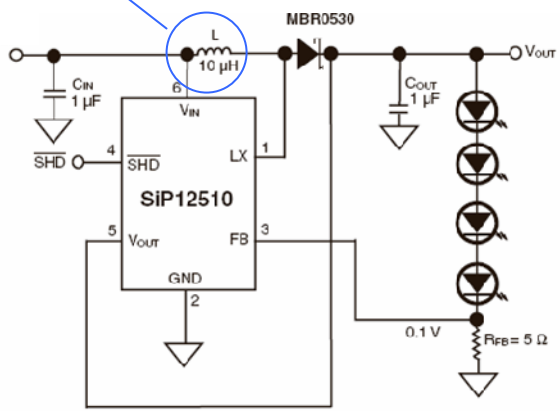
# New Products

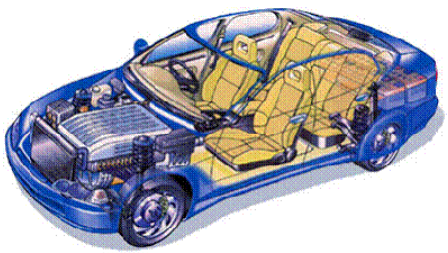
- IHLP and IFLP Power Inductors
  - Widest Range of Size and Values
  - New 6767 Size Now Available
  - Current Rating Up to 100 A
  - Values Up to 100 uH
- IHTH Power Inductor
  - 155+ deg C Operation
  - Excellent Saturation
  - Up to 2X Size Reduction over Toroids and Other Magnetic Shapes
- TJ5-HR and TJ3-HT 200 deg C Operation
  - Standard Toroid Series
  - High-Temperature
  - Values Up to 470 uH
  - Rated Current Up to 30 A
  - Horizontal and Vertical Mount Available

# Power Inductor Applications

- DC/DC CONVERTERS – POWER SUPPLIES
  - COMPUTERS – NOTEBOOKS, GRAPHICS, SERVERS
- CLASS “D” AMPLIFIERS
  - LCD TVs AND PORTABLE MP3 SPEAKERS
- LED DRIVER POWER
  - DLP TVs
  - LCD BACKLIGHTS
- AUTOMOTIVE
  - DC/DC CONVERTERS
  - FILTERS FOR NOISE SUPPRESSION
    - HID LIGHTING
    - MOTORS – HVAC, WIPER, POWER ACCESSORIES





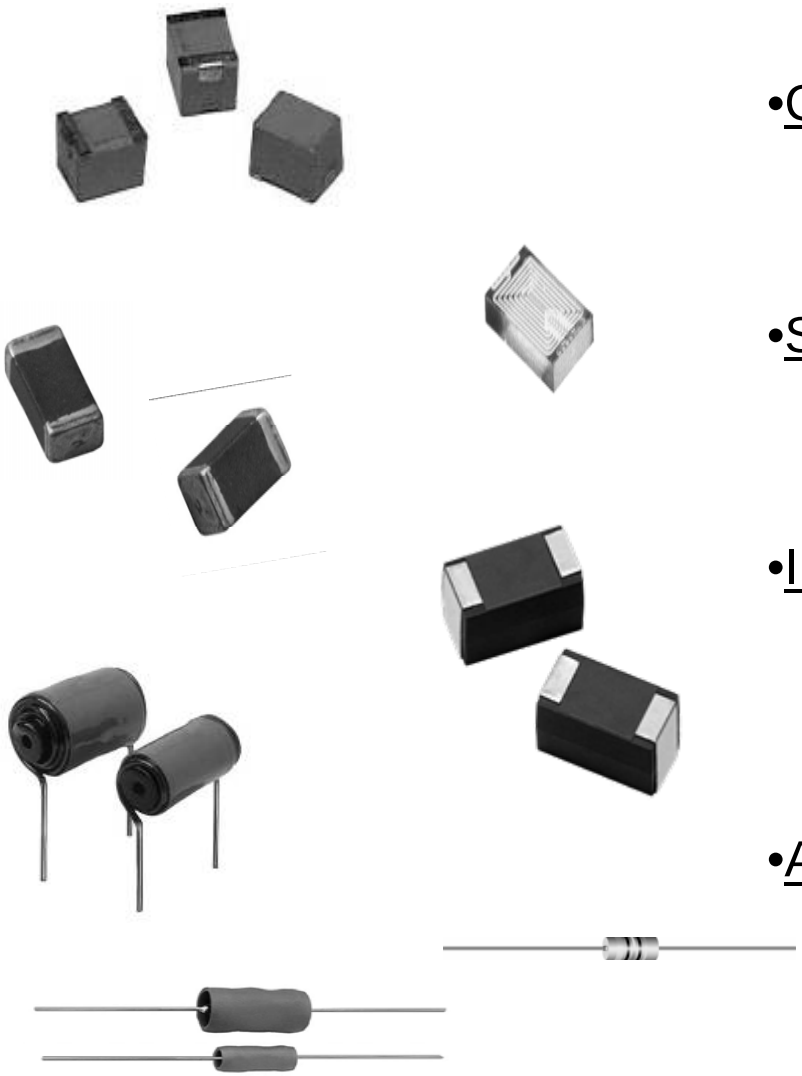



# Main Products

- <u>Custom Magnetics</u>
  - Sizes up to 100VA
  - Wire Sizes: #8 to #50 AWG
  - Extensive Medical Design Experience
  - Extensive Aerospace and Military Experience
  - FAE Software to Aid in Design
  - Low-Cost North American Manufacturing Site

# Main Products

- Standard and Custom Connectors
  - Edgeboard
  - Rack and Panel
  - High-Reliability Military and Aerospace



# Main Products

- Chip Inductors
  - Wide Range of Sizes and Values
  - Up to 2-GHz Operation
- Shield Beads
  - Many Sizes and Values Down to 0402
  - Array and High Current
- IHSM Power/RF Inductors
  - Values to 18 mH
  - Completely Encapsulated for High Reliability
  - Compliant Leads for Shock and Thermal Stability
- Axial Products
  - Full Line of RF and Power Through-Hole Products
  - Available in Pb-Free and Pb-Bearing Versions

# Featured Inductor Products

## New Sizes / Footprints Available in IHLP® Series

**IHLP-2020AB / IHLP-2020BZ / IHLP-2020CZ**
**IHLP-6767CZ / IHLP-6767DZ / IHLP-6767GZ**

FEATURES

- Shielded construction
- Frequency range: up to 5 MHz
- Excellent inductance and saturation stability versus temperature
- Standard inductance values: up to 22 µH
- Current rating: up to 100 A
- 100 % lead (Pb)-free and RoHS-compliant

APPLICATIONS

- Automotive
- PDA / notebook / desktop / server applications
- Low-profile, high-current power supplies
- DC/DC converters

## High-Current, High-Temperature Toroidal Inductors

**TJ3-HT / TJ5-HT**

FEATURES

- High temperature rating of 200 °C with no aging
- Toroid design reduces EMI
- Vertical and horizontal mounting options
- 100 % lead (Pb)-free and RoHS-compliant

APPLICATIONS

- Switching power supplies
- EMI / RFI filtering
- Output chokes
- Automotive
- Deep-well drilling

## High-Current, High-Temperature Inductors

**IHTH-0750 / IHTH-1125**

FEATURES

- +155 °C operation
- Shielded construction
- Frequency range: up to 1 MHz
- Handles high transient current spikes without saturation
- 100 % lead (Pb)-free and RoHS-compliant

APPLICATIONS

- Automotive
- Deep-well drilling
- Desktop / server applications
- Line filters

## Vishay Dale Inductors

- Visit www.vishay.com/inductors for more information