

IRF36ER1R8K Datasheet



The DNA of tech.®

DiGi Electronics Part Number	IRF36ER1R8K-DG
Manufacturer	Vishay Dale
Manufacturer Product Number	IRF36ER1R8K
Description	FIXED IND 1.8UH 790MA 320MOHM TH
Detailed Description	1.8 μ H Unshielded Inductor 790 mA 320mOhm Max Axial

<https://www.DiGi-Electronics.com>



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

IRF36ER1R8K

Series:

IRF-36

Manufacturer:

Vishay Dale



Inductors, Epoxy Conformal Coated, Axial Leaded



ELECTRICAL SPECIFICATIONS

Inductance Range: 0.27 μH to 1000 μH

Inductance Tolerance: $\pm 10\%$ from 0.1 μH to 1000 μH standard, $\pm 5\%$ optional

Operating Temperature Range: $-20\text{ }^{\circ}\text{C}$ to $+105\text{ }^{\circ}\text{C}$

Dielectric Strength: 250 V_{RMS}

MECHANICAL SPECIFICATIONS

Terminal Strength: Pull = 5 pounds, twist = $360\text{ }^{\circ}\text{C} \times 3$

Protection: Epoxy uniform roll coated

Leads: Tinned copper

ENVIRONMENTAL SPECIFICATIONS

Maximum Temperature Rise: $+20\text{ }^{\circ}\text{C}$

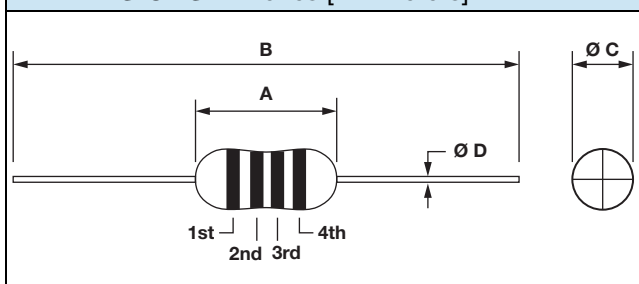
FEATURES

- High performance ferrite core is used in this epoxy conformally coated choke which allows for inductance values to 1000 μH
- Axial lead type, small lightweight design
- Special magnetic core structure contributes to high Q and self-resonant frequencies
- Treated with epoxy resin coating for humidity resistance to ensure long life
- Heat resistant adhesives and special structural design for effective open circuit measurement
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



RoHS
COMPLIANT
HALOGEN
FREE

DIMENSIONS in inches [millimeters]



MODEL	A (MAX.)	B	C (MAX.)	D
IRF-36	0.394 [10.0]	2.480 \pm 0.039 [63.0 \pm 1.0]	0.157 [4.0]	0.026 \pm 0.002 [0.65 \pm 0.05]

STANDARD ELECTRICAL SPECIFICATIONS

MODEL	IND. (μH)	TOL. (%)	Q MIN.	TEST FREQUENCY (MHz)	SRF MIN. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA)
IRF-36	0.27	$\pm 20\%$	25	25.2	250	0.24	1320
IRF-36	0.33	$\pm 20\%$	25	25.2	240	0.28	1280
IRF-36	0.39	$\pm 20\%$	25	25.2	230	0.32	1200
IRF-36	0.47	$\pm 20\%$	25	25.2	220	0.36	1150
IRF-36	0.56	$\pm 20\%$	25	25.2	215	0.41	1100
IRF-36	0.68	$\pm 20\%$	25	25.2	210	0.47	1030
IRF-36	0.82	$\pm 20\%$	45	25.2	172	0.24	980
IRF-36	1.0	$\pm 5\%, \pm 10\%$	45	25.2	140	0.24	920
IRF-36	1.2	$\pm 5\%, \pm 10\%$	50	7.96	140	0.27	880
IRF-36	1.5	$\pm 5\%, \pm 10\%$	50	7.96	131	0.30	830
IRF-36	1.8	$\pm 5\%, \pm 10\%$	55	7.96	121	0.32	790
IRF-36	2.2	$\pm 5\%, \pm 10\%$	55	7.96	110	0.35	750
IRF-36	2.7	$\pm 5\%, \pm 10\%$	60	7.96	100	0.35	720
IRF-36	3.3	$\pm 5\%, \pm 10\%$	65	7.96	94	0.35	670
IRF-36	3.9	$\pm 5\%, \pm 10\%$	65	7.96	86	0.37	640
IRF-36	4.7	$\pm 5\%, \pm 10\%$	70	7.96	80	0.39	620
IRF-36	5.6	$\pm 5\%, \pm 10\%$	70	7.96	74	0.43	590
IRF-36	6.8	$\pm 5\%, \pm 10\%$	75	7.96	68	0.48	550
IRF-36	8.2	$\pm 5\%, \pm 10\%$	70	7.96	53	0.52	530
IRF-36	10	$\pm 5\%, \pm 10\%$	70	7.96	45	0.58	500
IRF-36	12	$\pm 5\%, \pm 10\%$	70	2.52	34	0.63	480
IRF-36	15	$\pm 5\%, \pm 10\%$	70	2.52	20	0.72	460
IRF-36	18	$\pm 5\%, \pm 10\%$	65	2.52	14	0.77	430
IRF-36	22	$\pm 5\%, \pm 10\%$	40	2.52	9.9	0.84	410
IRF-36	27	$\pm 5\%, \pm 10\%$	55	2.52	7.6	0.94	390



STANDARD ELECTRICAL SPECIFICATIONS

MODEL	IND. (μH)	TOL. (%)	Q MIN.	TEST FREQUENCY (MHz)	SRF MIN. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA)
IRF-36	33	± 5 %, ± 10 %	55	2.52	6.3	1.03	370
IRF-36	39	± 5 %, ± 10 %	50	2.52	6.3	1.12	350
IRF-36	47	± 5 %, ± 10 %	45	2.52	6.3	1.22	340
IRF-36	56	± 5 %, ± 10 %	40	2.52	6.2	1.34	320
IRF-36	68	± 5 %, ± 10 %	40	2.52	5.7	1.47	306
IRF-36	82	± 5 %, ± 10 %	35	2.52	5.3	1.62	290
IRF-36	100	± 5 %, ± 10 %	30	2.52	4.8	1.80	275
IRF-36	120	± 5 %, ± 10 %	70	0.796	3.8	3.7	185
IRF-36	150	± 5 %, ± 10 %	70	0.796	3.5	4.2	175
IRF-36	180	± 5 %, ± 10 %	70	0.796	3.3	4.6	165
IRF-36	220	± 5 %, ± 10 %	70	0.796	3.0	5.1	155
IRF-36	270	± 5 %, ± 10 %	65	0.796	2.8	5.8	146
IRF-36	330	± 5 %, ± 10 %	65	0.796	2.6	6.4	137
IRF-36	390	± 5 %, ± 10 %	65	0.796	2.4	7.0	133
IRF-36	470	± 5 %, ± 10 %	60	0.796	2.25	7.7	126
IRF-36	560	± 5 %, ± 10 %	60	0.796	2.10	8.5	120
IRF-36	680	± 5 %, ± 10 %	55	0.796	1.95	9.4	113
IRF-36	820	± 5 %, ± 10 %	55	0.796	1.85	12.0	100
IRF-36	1000	± 5 %, ± 10 %	50	0.796	1.40	17.4	100

ORDERING INFORMATION

MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD
IRF-36	4.7 μH	± 10 %	ER	e3

GLOBAL PART NUMBER

<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px;">I</div> <div style="border: 1px solid black; padding: 2px;">R</div> <div style="border: 1px solid black; padding: 2px;">F</div> <div style="border: 1px solid black; padding: 2px;">3</div> <div style="border: 1px solid black; padding: 2px;">6</div> </div> <p>MODEL</p>	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px;">E</div> <div style="border: 1px solid black; padding: 2px;">R</div> </div> <p>PACKAGE CODE</p>	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px;">4</div> <div style="border: 1px solid black; padding: 2px;">R</div> <div style="border: 1px solid black; padding: 2px;">7</div> </div> <p>INDUCTANCE VALUE</p>	<div style="border: 1px solid black; padding: 2px;">K</div> <p>INDUCTANCE TOLERANCE</p>
---	--	--	---



Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Hyperlinks included in this datasheet may direct users to third-party websites. These links are provided as a convenience and for informational purposes only. Inclusion of these hyperlinks does not constitute an endorsement or an approval by Vishay of any of the products, services or opinions of the corporation, organization or individual associated with the third-party website. Vishay disclaims any and all liability and bears no responsibility for the accuracy, legality or content of the third-party website or for that of subsequent links.

Vishay products are not designed for use in life-saving or life-sustaining applications or any application in which the failure of the Vishay product could result in personal injury or death unless specifically qualified in writing by Vishay. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.

OUR CERTIFICATE

DiGi provide top-quality products and perfect service for customer worldwide through standardization, technological innovation and continuous improvement. DiGi through third-party certification, we stricly control the quality of products and services. Welcome your RFQ to

Email: Info@DiGi-Electronics.com



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.