

## Inductors, Commercial, Molded, Axial Leaded



### ELECTRICAL SPECIFICATIONS

**Inductance Tolerance:**  $\pm 10\%$  on Q-meter for 0.10  $\mu\text{H}$  to 22  $\mu\text{H}$ ,  $\pm 5\%$  1000 cps bridge for 27  $\mu\text{H}$  to 100  $\mu\text{H}$ ,  $\pm 5\%$  on Q-meter for 120  $\mu\text{H}$  to 1000  $\mu\text{H}$

**Note**

- L and Q are not always tested at the same frequency, inductance values that are tested on Q-meter, are tested at standard test frequencies

**Dielectric Strength:** 700  $V_{\text{RMS}}$  at sea level

**Operating Temperature:**  $-55\text{ }^{\circ}\text{C}$  to  $+125\text{ }^{\circ}\text{C}$

**Self-Resonant Frequency:** Minimum SRF measured with full length leads on grid-dip meter

**Q:** Measured on Q-meter

### DENSITY SPECIFICATIONS

**Weight:** 0.9 g maximum

### FEATURES

- Classification is grade 1, class B
- Inductance range is 0.10  $\mu\text{H}$  to 1000  $\mu\text{H}$
- Proven reliability molded inductors
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



**RoHS**  
COMPLIANT

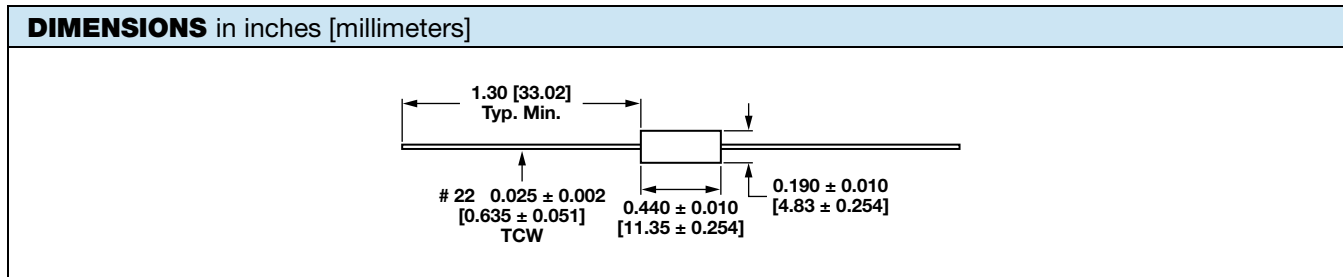
### MECHANICAL SPECIFICATIONS

**Terminal Strength:** Meets 5 lb pull per MIL-PRF-15305 (latest revision)

### ENVIRONMENTAL SPECIFICATIONS

**Moisture and Shock Resistance:** Meets requirements of MIL-PRF-15305, grade 1, class B

**Vibration:** High frequency, 10 Hz to 2000 Hz at  $20\text{ g} \pm 10\%$  maximum for 12 logarithmic swings, each of 20 min duration repeated for each of three mutually perpendicular planes



STANDARD ELECTRICAL SPECIFICATIONS							
MODEL <sup>(1)</sup>	IND. ( $\mu\text{H}$ )	TOL. (%)	Q MIN.	TEST FREQUENCY (MHz)	SRF MIN. (MHz)	DCR MAX. ( $\Omega$ )	RATED DC CURRENT (mA)
IM-6RFCS-40	0.10	$\pm 10$	75	50	400	0.02	4000
IM-6RFCS-40	0.12	$\pm 10$	75	50	400	0.025	3500
IM-6RFCS-40	0.15	$\pm 10$	75	50	400	0.03	3000
IM-6RFCS-40	0.18	$\pm 10$	75	50	400	0.03	3000
IM-6RFCS-40	0.22	$\pm 10$	75	50	400	0.03	3000
IM-6RFCS-40	0.27	$\pm 10$	70	45	376	0.04	2700
IM-6RFCS-40	0.33	$\pm 10$	70	40	352	0.05	2500
IM-6RFCS-40	0.39	$\pm 10$	65	40	320	0.08	2000
IM-6RFCS-40	0.47	$\pm 10$	60	25	288	0.08	2000
IM-6RFCS-40	0.56	$\pm 10$	55	25	264	0.10	1700
IM-6RFCS-40	0.68	$\pm 10$	55	25	240	0.12	1500
IM-6RFCS-40	0.82	$\pm 10$	50	25	220	0.18	1300
IM-6RFCS-40	1.0	$\pm 10$	50	20	200	0.24	1100
IM-6RFCS-40	1.2	$\pm 10$	45	20	176	0.35	1000
IM-6RFCS-40	1.5	$\pm 10$	45	15	160	0.43	850
IM-6RFCS-40	1.8	$\pm 10$	45	15	144	0.65	720
IM-6RFCS-40	2.2	$\pm 10$	45	15	132	0.80	610

PHENOLIC CORE

**Note**

<sup>(1)</sup> Model electricals and tolerances shown



STANDARD ELECTRICAL SPECIFICATIONS							
MODEL <sup>(1)</sup>	IND. (μH)	TOL. (%)	Q MIN.	TEST FREQUENCY (MHz)	SRF MIN. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA)
IM-6RFCS-40	2.7	± 10	55	10	88	0.12	1600
IM-6RFCS-40	3.3	± 10	55	10	80	0.15	1400
IM-6RFCS-40	3.9	± 10	60	10	76	0.23	1200
IM-6RFCS-40	4.7	± 10	70	7.9	72	0.30	1000
IM-6RFCS-40	5.6	± 10	65	7.9	64	0.45	900
IM-6RFCS-40	6.8	± 10	65	7.9	56	0.55	800
IM-6RFCS-40	8.2	± 10	60	7.9	52	0.65	720
IM-6RFCS-40	10	± 10	60	5.0	48	0.73	650
IM-6RFCS-40	12	± 10	65	5.0	42	1.1	590
IM-6RFCS-40	15	± 10	80	2.5	38	1.4	500
IM-6RFCS-40	18	± 10	75	2.5	34	1.6	460
IM-6RFCS-40	22	± 10	75	2.5	32	1.8	430
IM-6RFCS-40	27	± 5	75	2.5	29	2.7	360
IM-6RFCS-40	33	± 5	85	2.5	26	3.5	300
IM-6RFCS-40	39	± 5	80	2.5	21	3.8	290
IM-6RFCS-40	47	± 5	80	2.5	18	4.0	275
IM-6RFCS-40	56	± 5	75	2.5	15	4.4	265
IM-6RFCS-40	68	± 5	75	2.5	13	4.7	250
IM-6RFCS-40	82	± 5	75	2.5	10	5.3	235
IM-6RFCS-40	100	± 5	75	1.5	8.0	6.0	220
IM-6RFCS-40	120	± 5	65	0.79	5.7	5.0	170
IM-6RFCS-40	150	± 5	65	0.79	5.4	5.8	164
IM-6RFCS-40	180	± 5	65	0.79	5.0	6.6	158
IM-6RFCS-40	220	± 5	65	0.79	4.7	7.4	155
IM-6RFCS-40	270	± 5	65	0.79	4.5	8.0	150
IM-6RFCS-40	300	± 5	65	0.79	4.2	8.6	145
IM-6RFCS-40	330	± 5	65	0.79	4.0	8.9	142
IM-6RFCS-40	360	± 5	65	0.79	3.8	9.6	137
IM-6RFCS-40	390	± 5	65	0.79	3.6	9.9	135
IM-6RFCS-40	430	± 5	65	0.79	3.4	10.4	131
IM-6RFCS-40	470	± 5	65	0.79	3.2	10.9	128
IM-6RFCS-40	510	± 5	65	0.79	3.0	11.6	124
IM-6RFCS-40	560	± 5	65	0.79	2.9	11.8	123
IM-6RFCS-40	620	± 5	60	0.79	2.8	12.5	120
IM-6RFCS-40	680	± 5	60	0.79	2.7	13.5	115
IM-6RFCS-40	750	± 5	60	0.79	2.6	14.0	113
IM-6RFCS-40	820	± 5	60	0.79	2.5	15.0	110
IM-6RFCS-40	910	± 5	60	0.79	2.4	15.5	107
IM-6RFCS-40	1000	± 5	60	0.79	2.2	16.5	104

IRON CORE

**Note**

(1) Model electricals and tolerances shown

MARKING
- Color coded per MIL-PRF-15305 (latest revision)

ORDERING INFORMATION				
IM-6RFCS-40	10 μH	± 10 %	ER	e2
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER															
I	M	0	6	R	F	C	S	E	R	1	0	0	K	4	0
MODEL							PACKAGE CODE		INDUCTANCE VALUE			INDUCTANCE TOLERANCE	SERIES		



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