

TMWC Series (Rev. 1.0)



Features

- * RoHS compliant
- * Lead-free materials is used for the plating on the terminals
- * Use metal terminals that realize excellent connection.
- * Good heat durability that withstands lead-free reflow.
- * High resistance to heat, humidity, mechanical shocks and presser. Accurate dimensions for automatically surface mounted

Product Identification

TMWC 3225 — 100 M H
 1 2 3 4 5

1. Product Code
2. Size Code
3. Inductance: 10uH
4. Tolerance: J=±5%, K=±10%, M=±20%
5. H: high current

Applications

- * Mobile device
- * Handheld device
- * Low-profile device
- * Panel...

Operating & Storage Condition

- * Operating Temp. : -25 to +85°C
- * Storage Temp. : -25 to +85°C
- * Storage Life Time : 12 Months @25°C , RH 65%

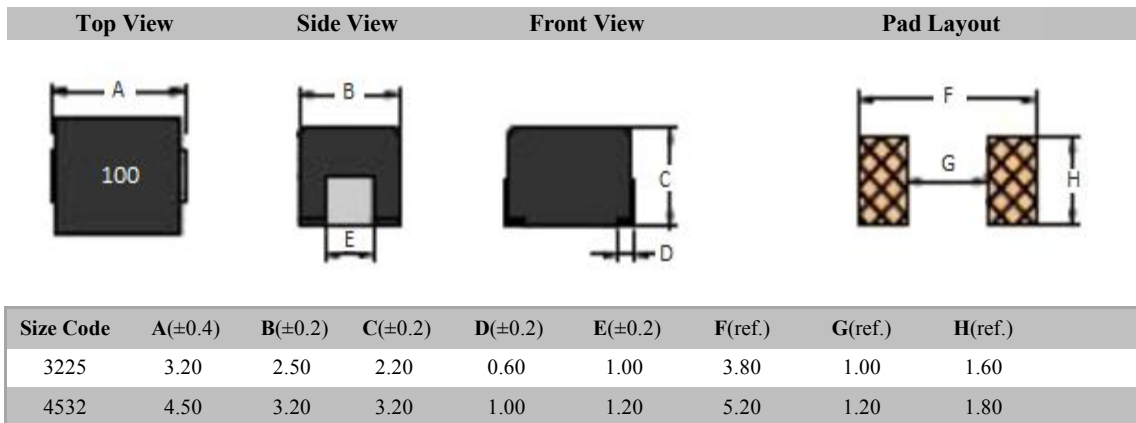
Test Equipment

- * HP4284A, HP42841A- L, IDC, Q, RDC
- * HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions

- * Ambient Temp : 20+/-5°C
- * Relative Humidity : 75+/-10%

Dimension & Recommended PAD Layout: [mm]



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Electrical Characteristics

Part Number	Inductance (uH)	Q (min.)	Test Freq. (MHz)	SRF (MHz) min.	DCR (Ω) max.	IDC (mA) max.
TMWC3225-R10M/K	0.10	28	100.0	700	0.44	450
TMWC3225-R12M/K	0.12	30	25.20	500	0.22	450
TMWC3225-R15M/K	0.15	30	25.20	450	0.25	450
TMWC3225-R18M/K	0.18	30	25.20	400	0.28	450
TMWC3225-R22M/K	0.22	30	25.20	350	0.32	450
TMWC3225-R27M/K	0.27	30	25.20	320	0.36	450
TMWC3225-R33M/K	0.33	30	25.20	300	0.40	450
TMWC3225-R39M/K	0.39	30	25.20	250	0.45	450
TMWC3225-R47M/K	0.47	30	25.20	220	0.50	450
TMWC3225-R56M/K	0.56	30	25.20	180	0.55	450
TMWC3225-R68M/K	0.68	30	25.20	160	0.60	450
TMWC3225-R82M/K	0.82	30	25.20	140	0.65	450
TMWC3225-1R0K/J	1.00	30	7.960	120	0.70	400
TMWC3225-1R2K/J	1.20	30	7.960	100	0.75	390
TMWC3225-1R5K/J	1.50	30	7.960	85	0.85	370
TMWC3225-1R8K/J	1.80	30	7.960	80	0.90	350
TMWC3225-2R2K/J	2.20	30	7.960	75	1.00	320
TMWC3225-2R7K/J	2.70	30	7.960	70	1.10	290
TMWC3225-3R3K/J	3.30	30	7.960	60	1.20	260
TMWC3225-3R9K/J	3.90	30	7.960	55	1.30	250
TMWC3225-4R7K/J	4.70	30	7.960	50	1.50	220
TMWC3225-5R6K/J	5.60	30	7.960	45	1.60	200
TMWC3225-6R8K/J	6.80	30	7.960	40	1.80	180
TMWC3225-8R2K/J	8.20	30	7.960	35	2.00	170
TMWC3225-100K/J	10.0	30	2.520	30	2.10	150
TMWC3225-120K/J	12.0	30	2.520	20	2.50	140
TMWC3225-150K/J	15.0	30	2.520	20	2.80	130
TMWC3225-180K/J	18.0	30	2.520	20	3.30	120
TMWC3225-220K/J	22.0	30	2.520	20	3.70	110
TMWC3225-270K/J	27.0	30	2.520	20	5.00	80
TMWC3225-330K/J	33.0	30	2.520	17	5.60	70
TMWC3225-390K/J	39.0	30	2.520	16	6.40	65
TMWC3225-470K/J	47.0	30	2.520	15	7.0	60
TMWC3225-560K/J	56.0	30	2.520	13	8.0	55
TMWC3225-680K/J	68.0	30	2.520	12	9.0	50
TMWC3225-820K/J	82.0	30	2.520	11	10.0	45
TMWC3225-101K/J	100.0	20	0.796	10	10.0	40
TMWC3225-121K/J	120.0	20	0.796	10	11.0	70
TMWC3225-151K/J	150.0	20	0.796	8	15.0	65
TMWC3225-181K/J	180.0	20	0.796	7	17.0	60
TMWC3225-221K/J	220.0	20	0.796	7	21.0	50

* IDC : This indicates the value of current when the inductance is 10% lower than it's initial value at D.C. superimposition or D.C.current when at $\Delta T=40^{\circ}\text{C}$, whichever is lower. ($T_a=20^{\circ}\text{C}$)

* Tolerance: J=±5%, K=±10%, M=±20%



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Electrical Characteristics

Part Number	Inductance (uH)	Q (min.)	Test Freq. (MHz)	SRF (MHz) min.	DCR (Ω) max.	IDC (mA) max.
TMWC4532-R10M/K	0.10	35	25.20	300	0.18	800
TMWC4532-R12M/K	0.12	35	25.20	280	0.20	770
TMWC4532-R15M/K	0.15	35	25.20	250	0.22	730
TMWC4532-R18M/K	0.18	35	25.20	220	0.24	700
TMWC4532-R22M/K	0.22	40	25.20	200	0.25	665
TMWC4532-R27M/K	0.27	40	25.20	180	0.26	635
TMWC4532-R33M/K	0.33	40	25.20	165	0.28	605
TMWC4532-R39M/K	0.39	40	25.20	150	0.30	575
TMWC4532-R47M/K	0.47	40	25.20	145	0.32	545
TMWC4532-R56M/K	0.56	40	25.20	140	0.36	520
TMWC4532-R68M/K	0.68	40	25.20	135	0.40	500
TMWC4532-R82M/K	0.82	40	25.20	130	0.45	475
TMWC4532-1R0K/J	1.00	50	7.960	100	0.50	450
TMWC4532-1R2K/J	1.20	50	7.960	80	0.55	430
TMWC4532-1R5K/J	1.50	50	7.960	70	0.60	410
TMWC4532-1R8K/J	1.80	50	7.960	60	0.65	390
TMWC4532-2R2K/J	2.20	50	7.960	55	0.70	380
TMWC4532-2R7K/J	2.70	50	7.960	50	0.75	370
TMWC4532-3R3K/J	3.30	50	7.960	45	0.80	355
TMWC4532-3R9K/J	3.90	50	7.960	40	0.90	330
TMWC4532-4R7K/J	4.70	50	7.960	35	1.00	315
TMWC4532-5R6K/J	5.60	50	7.960	33	1.10	300
TMWC4532-6R8K/J	6.80	50	7.960	27	1.20	285
TMWC4532-8R2K/J	8.20	50	7.960	25	1.40	270
TMWC4532-100K/J	10.0	50	2.520	20	1.60	250
TMWC4532-120K/J	12.0	50	2.520	18	2.00	225
TMWC4532-150K/J	15.0	50	2.520	17	2.50	200
TMWC4532-180K/J	18.0	50	2.520	15	2.80	190
TMWC4532-220K/J	22.0	50	2.520	13	3.20	180
TMWC4532-270K/J	27.0	50	2.520	12	3.60	170
TMWC4532-330K/J	33.0	50	2.520	11	4.00	160
TMWC4532-390K/J	39.0	50	2.520	10	4.50	150
TMWC4532-470K/J	47.0	50	2.520	10	5.0	140
TMWC4532-560K/J	56.0	50	2.520	9.0	5.5	135
TMWC4532-680K/J	68.0	50	2.520	9.0	6.0	130
TMWC4532-820K/J	82.0	50	2.520	8.0	7.0	120
TMWC4532-101K/J	100.0	40	0.796	8.0	8.0	110
TMWC4532-121K/J	120.0	40	0.796	6.0	8.0	110
TMWC4532-151K/J	150.0	40	0.796	5.0	9.0	105
TMWC4532-181K/J	180.0	40	0.796	5.0	9.5	102
TMWC4532-221K/J	220.0	40	0.796	4.0	10.0	100
TMWC4532-271K/J	270.0	40	0.796	4.0	12.0	92
TMWC4532-331K/J	330.0	40	0.796	3.5	14.0	85
TMWC4532-391K/J	390.0	40	0.796	3.0	18.0	80
TMWC4532-471K/J	470.0	40	0.796	3.0	26.0	62
TMWC4532-561K/J	560.0	30	0.796	3.0	30.0	50
TMWC4532-681K/J	680.0	30	0.796	3.0	30.0	50
TMWC4532-821K/J	820.0	30	0.796	2.5	35.0	30
TMWC4532-102K/J	1000.0	20	0.252	2.5	40.0	30

* IDC : This indicates the value of current when the inductance is 10% lower than it's initial value at D.C. superimposition or D.C.current when at $\Delta T=40^{\circ}\text{C}$, whichever is lower. ($T_a=20^{\circ}\text{C}$)

* Tolerance: J=±5%, K=±10%, M=±20%

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Part Number	Inductance (uH)	Q (min.)	Test Freq. (MHz)	SRF (MHz) min.	DCR (Ω) max.	IDC (mA) max.
TMWC3225-1R0MH	1.0	10	7.960	100	0.156	770
TMWC3225-1R5MH	1.5	10	7.960	80	0.195	580
TMWC3225-2R2MH	2.2	10	7.960	65	0.260	480
TMWC3225-3R3MH	3.3	10	7.960	55	0.325	400
TMWC3225-4R7MH	4.7	10	7.960	45	0.520	320
TMWC3225-6R8MH	6.8	10	7.960	35	0.650	280
TMWC3225-100KH	10.0	15	2.520	28	1.105	220
TMWC3225-150KH	15.0	15	2.520	25	1.690	180
TMWC3225-220KH	22.0	15	2.520	20	2.600	145
TMWC3225-330KH	33.0	15	2.520	15	3.640	115
TMWC3225-390KH	39.0	15	2.520	14	4.500	110
TMWC3225-470KH	47.0	15	2.520	13	5.460	105
TMWC3225-680KH	68.0	15	2.520	10	8.450	85
TMWC3225-820KH	82.0	15	2.520	9	8.710	80
TMWC3225-101KH	100.0	15	0.796	8	9.140	75
TMWC4532-1R0KH	1.0	10	7.960	180	0.11	1050
TMWC4532-1R2KH	1.2	10	7.960	160	0.12	1000
TMWC4532-1R5KH	1.5	10	7.960	130	0.15	950
TMWC4532-1R8KH	1.8	10	7.960	100	0.16	900
TMWC4532-2R2KH	2.2	10	7.960	80	0.18	850
TMWC4532-2R7KH	2.7	10	7.960	60	0.20	800
TMWC4532-3R3KH	3.3	10	7.960	45	0.22	750
TMWC4532-3R9KH	3.9	10	7.960	40	0.24	700
TMWC4532-4R7KH	4.7	10	7.960	35	0.27	650
TMWC4532-5R6KH	5.6	10	7.960	30	0.30	650
TMWC4532-6R8KH	6.8	10	7.960	28	0.35	600
TMWC4532-8R2KH	8.2	10	7.960	25	0.40	600
TMWC4532-100KH	10.0	10	2.520	22	0.50	550
TMWC4532-120KH	12.0	10	2.520	21	0.60	500
TMWC4532-150KH	15.0	10	2.520	20	0.70	450
TMWC4532-180KH	18.0	10	2.520	19	0.80	400
TMWC4532-220KH	22.0	10	2.520	18	0.90	370
TMWC4532-270KH	27.0	10	2.520	16	1.20	330
TMWC4532-330KH	33.0	10	2.520	14	1.40	300
TMWC4532-390KH	39.0	10	2.520	12	1.60	280
TMWC4532-470KH	47.0	10	2.520	12	1.90	260
TMWC4532-560KH	56.0	10	2.520	11	2.20	240
TMWC4532-680KH	68.0	10	2.520	10	2.60	220
TMWC4532-820KH	82.0	10	2.520	9	3.50	200
TMWC4532-101KH	100.0	20	0.796	8	4.00	180
TMWC4532-121KH	120.0	20	0.796	8	4.50	160
TMWC4532-151KH	150.0	20	0.796	7	6.50	140
TMWC4532-181KH	180.0	20	0.796	7	7.50	120
TMWC4532-221KH	220.0	20	0.796	6	9.00	120
TMWC4532-271KH	270.0	20	0.796	5	11.00	100
TMWC4532-331KH	330.0	20	0.796	4.0	13.00	90

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* Tolerance: J=±5%, K=±10%, M=±20%

