

SURFACE MOUNT MLCCs 10 - 200 VDC

| CASE SIZE | | | Voltage | AVAILABLE CAPACITANCE CODE | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------|--------|--|---------|----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| JDI | Inches | (mm) | | 0R5 | XRX | 100 | 120 | 150 | 180 | 220 | 270 | 330 | 390 | 470 | 560 | 680 | 820 | 101 | 121 | 151 | 181 | 221 | 271 | 331 | 391 | 471 | 561 | 681 | 821 |
| R05 | 0201 | (0603) L .024 ±.001 W .012 ±.001 T .012 ±.001 EB .006 ±.002 (0.60 ±.03) (0.30 ±.03) (0.30 ±.03) (0.15±.05) | 25V | █ | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 16V | █ | | | | | | | | | | | █ | | | | | | | | | | | | | | |
| | | | 10V | █ | | | | | | | | | | | █ | | | | | | | █ | | | | | | | |
| | | | 50V | █ | | | | | | | | | | | █ | | | | | | | | | | | | | | |
| R07 | 0402 | (1005) L .040 ±.004 W .020 ±.004 T .025 Max. EB .008 ±.004 (1.02 ±.10) (0.51 ±.10) (0.64) (0.20±.10) | 50V | █ | | | | | | | | | | | █ | | | | | | | | | | | | | | |
| | | | 25V | █ | | | | | | | | | | | █ | | | | | | | | | | | | | | |
| | | | 16V | █ | | | | | | | | | | | █ | | | | | | | | | | | | | | |
| | | | 10V | █ | | | | | | | | | | | █ | | | | | | | | | | | | | | |
| R14 | 0603 | (1608) L .063 ±.008 W .032 ±.008 T .035 Max. EB .010±.005 (1.60 ±.20) (0.81 ±.20) (0.89) (.25±.13) | 200V | █ | | | | | | | | | | | █ | | | | | | | | | | | | | | |
| | | | 100V | █ | | | | | | | | | | | █ | | | | | | | | | | | | | | |
| | | | 50V | █ | | | | | | | | | | | █ | | | | | | | | | | | | | | |
| | | | 25V | █ | | | | | | | | | | | █ | | | | | | | | | | | | | | |
| | | | 16V | █ | | | | | | | | | | | █ | | | | | | | | | | | | | | |
| R15 | 0805 | (2012) L .080 ±.010 W .050 ±.010 T .050 Max. EB .020±.010 (2.03 ±.25) (1.27 ±.25) (1.27) (0.51±.25) | 200V | █ | | | | | | | | | | | █ | | | | | | | | | | | | | | |
| | | | 100V | █ | | | | | | | | | | | █ | | | | | | | | | | | | | | |
| | | | 50V | █ | | | | | | | | | | | █ | | | | | | | | | | | | | | |
| | | | 25V | █ | | | | | | | | | | | █ | | | | | | | | | | | | | | |
| | | | 16V | █ | | | | | | | | | | | █ | | | | | | | | | | | | | | |
| R18 | 1206 | (3216) L .125 ±.010 W .062 ±.010 T .050 Max. EB .020 ±.010 (3.17 ±.25) (1.57 ±.25) (1.27) (0.51 ±.25) | 200V | █ | | | | | | | | | | | █ | | | | | | | | | | | | | | |
| | | | 100V | █ | | | | | | | | | | | █ | | | | | | | | | | | | | | |
| | | | 50V | █ | | | | | | | | | | | █ | | | | | | | | | | | | | | |
| | | | 25V | █ | | | | | | | | | | | █ | | | | | | | | | | | | | | |
| S41 | 1210 | (3224) L .125 ±.010 W .095 ±.010 T .065 Max. EB .020 ±.010 (3.18 ±.25) (2.41 ±.25) (1.65) (0.51 ±.25) | 200V | | | | | | | | | | | | NP0 | | | | | | | | | | | | | | |
| | | | 100V | | | | | | | | | | | | X7R | | | | | | | | | | | | | | |
| | | | 50V | | | | | | | | | | | | X5R | | | | | | | | | | | | | | |
| | | | 25V | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 16V | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S43 | 1812 | (4532) L .175 ±.010 W .125 ±.010 T .085 Max. EB .025 ±.015 (4.45 ±.25) (3.17 ±.25) (2.16) (0.64 ±.38) | 200V | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 100V | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 50V | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 25V | | | | | | | | | | | | | | | | | | | | | | | | | | |



How To ORDER - SURFACE MOUNT MLCC

Part number written: 100R07W104KV4E

| | | | | | | | |
|--|--|-------------------------------|---|--|--|--|---|
| 100 | R 07 | W | 104 | K | V | 4 | E |
| VOLTAGE | SERIES/SIZE | DIELECTRIC | CAPACITANCE | TOLERANCE | TERMINATION | MARKING | PACKING |
| 100 = 10 V DC 160 = 16 V DC 250 = 25 V DC 500 = 50 V DC 101 = 100 V DC 201 = 200 V DC | R05 = 0201 R07 = 0402 R14 = 0603 R15 = 0805 R18 = 1206 S41 = 1210 S43 = 1812 | N = NP0 W = X7R X = X5R | 1st two digits are significant; third digit denotes number of zeros, R = decimal. 5R6 = 5.6 pF 100 = 10 pF 102 = 1,000 pF 474 = 0.47 μF | * B = ± 0.10 pF * C = ± 0.25 pF * D = ± 0.50 pF F = ± 1 % G = ± 2 % J = ± 5 % K = ± 10 % M = ± 20 % *Values < 10 pF only | V = Nickel Barrier with 100% Tin Plating (Matte) T = SnPb | 3 = Special 4 = Unmarked 6 = EIA Code* *Not available on sizes ≤ 0402 | E = Embossed 7" T = Punched 7" U = Embossed 13" R = Punched 13" No code = bulk Tape specifications on page 48. Not all tape styles are available on all parts. |



SURFACE MOUNT MLCCs 10 - 200 VDC

| AVAILABLE CAPACITANCE CODE | | | | | | | | | | | | | | | | | | | | | | | | | | | Voltage | CASE SIZE | | | | | | | | | | | | |
|----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------|-----------|-----|-----|-----|-----|-----|--|--|--|-----|------|-------------|-------------|
| 122 | 152 | 182 | 222 | 272 | 332 | 392 | 472 | 562 | 822 | 103 | 123 | 153 | 183 | 223 | 273 | 333 | 473 | 563 | 683 | 823 | 104 | 224 | 334 | 474 | 105 | 225 | | | 335 | 475 | 106 | 476 | 107 | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | NP0 | | | | | | | | | | | | | | 25V | 0201 R05 | |
| | | | | | | | | | | | | | | | | | | | | | | | | X7R | | | | | | | | | | | | | 16V | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | X5R | | | | | | | | | | | | | 10V | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 50V | 0402 R07 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 25V | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 16V | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 10V | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 200V | 0603 R14 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 100V | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 50V | | |
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| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 200V | 0805 R15 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 100V | | |
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| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 200V | 1206 R18 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 100V | | |
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| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 200V | 1210 S41 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 100V | | |
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See Tanceram High Capacitance Series for values ≥ 1.0µF

ELECTRICAL CHARACTERISTICS

Please refer to page 78 of the catalog or www.johansondielectrics.com

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