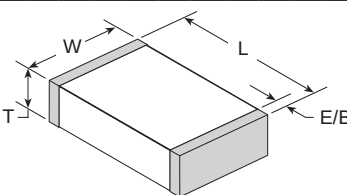


# SURFACE MOUNT MLCCs 10 - 200 VDC

| 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 | 102 |  |  |
| R05       | 0201   | (0603)<br>L .024 ±.001<br>W .012 ±.001<br>T .012 ±.001<br>EB .006 ±.002<br>(0.60 ±.03)<br>(0.30 ±.03)<br>(0.30 ±.03)<br>(0.15±.05) |         |                            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|           |        |                                                                                                                                    | 25V     |                            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|           |        |                                                                                                                                    | 16V     |                            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|           |        |                                                                                                                                    | 10V     |                            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| R07       | 0402   | (1005)<br>L .040 ±.004<br>W .020 ±.004<br>T .025 Max.<br>EB .008 ±.004<br>(1.02 ±.10)<br>(0.51 ±.10)<br>(0.64)<br>(0.20±.10)       | 50V     |                            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|           |        |                                                                                                                                    | 25V     |                            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|           |        |                                                                                                                                    | 16V     |                            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|           |        |                                                                                                                                    | 10V     |                            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| R14       | 0603   | (1608)<br>L .063 ±.008<br>W .032 ±.008<br>T .035 Max.<br>EB .010±.005<br>(1.60 ±.20)<br>(0.81 ±.20)<br>(0.89)<br>(.25±.13)         | 200V    |                            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|           |        |                                                                                                                                    | 100V    |                            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|           |        |                                                                                                                                    | 50V     |                            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|           |        |                                                                                                                                    | 25V     |                            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|           |        |                                                                                                                                    | 16V     |                            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| R15       | 0805   | (2012)<br>L .080 ±.010<br>W .050 ±.010<br>T .050 Max.<br>EB .020±.010<br>(2.03 ±.25)<br>(1.27 ±.25)<br>(1.27)<br>(0.51±.25 )       | 200V    |                            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|           |        |                                                                                                                                    | 100V    |                            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|           |        |                                                                                                                                    | 50V     |                            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|           |        |                                                                                                                                    | 25V     |                            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|           |        |                                                                                                                                    | 16V     |                            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| R18       | 1206   | (3216)<br>L .125 ±.010<br>W .062 ±.010<br>T .050 Max.<br>EB .020 ±.010<br>(3.17 ±.25)<br>(1.57 ±.25)<br>(1.27)<br>(0.51 ±.25)      | 200V    |                            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|           |        |                                                                                                                                    | 100V    |                            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|           |        |                                                                                                                                    | 50V     |                            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|           |        |                                                                                                                                    | 25V     |                            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| S41       | 1210   | (3224)<br>L .125 ±.010<br>W .095 ±.010<br>T .065 Max.<br>EB .020 ±.010<br>(3.18 ±.25)<br>(2.41 ±.25)<br>(1.65)<br>(0.51 ±.25)      | 200V    |                            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|           |        |                                                                                                                                    | 100V    |                            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|           |        |                                                                                                                                    | 50V     |                            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|           |        |                                                                                                                                    | 25V     |                            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|           |        |                                                                                                                                    | 16V     |                            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| S43       | 1812   | (4532)<br>L .175 ±.010<br>W .125 ±.010<br>T .085 Max.<br>EB .025 ±.015<br>(4.45 ±.25)<br>(3.17 ±.25)<br>(2.16)<br>(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<br>160 = 16 V DC<br>250 = 25 V DC<br>500 = 50 V DC<br>101 = 100 V DC<br>201 = 200 V DC | R05 = 0201<br>R07 = 0402<br>R14 = 0603<br>R15 = 0805<br>R18 = 1206<br>S41 = 1210<br>S43 = 1812 | N = NP0<br>W = X7R<br>X = X5R | 1st two digits are significant; third digit denotes number of zeros, R = decimal.<br><br>5R6 = 5.6 pF<br>100 = 10 pF<br>102 = 1,000 pF<br>474 = 0.47 μF | * B = ± 0.10 pF<br>* C = ± 0.25 pF<br>* D = ± 0.50 pF<br>F = ± 1 %<br>G = ± 2 %<br>J = ± 5 %<br>K = ± 10 %<br>M = ± 20 %<br><br>*Values < 10 pF only | V = Nickel Barrier with 100% Tin Plating (Matte)<br><br>T = SnPb | 3 = Special<br>4 = Unmarked<br>6 = EIA Code*<br><br>*Not available on sizes ≤ 0402 | E = Embossed 7"<br>T = Punched 7"<br>U = Embossed 13"<br>R = Punched 13"<br>No code = bulk<br><br>Tape specifications on page 48. Not all tape styles are available on all parts. |



See Tanceram High  
Capacitance Series  
for values  $\geq 1.0\mu F$

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