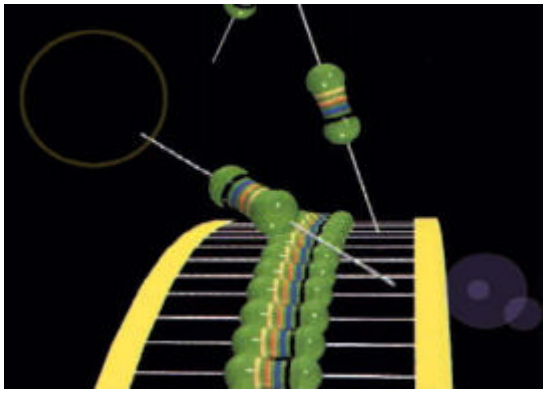
# ECM Epoxy Coated Axial Chokes

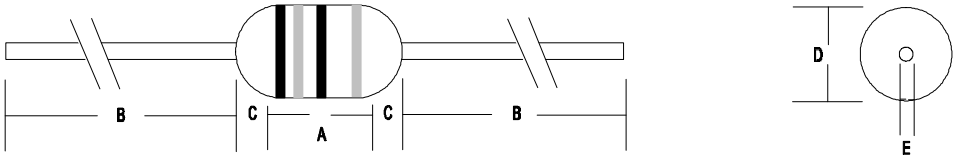
## EC22/24/36/46 Series



- 4 Component Sizes
- Pre-forming options
- Excellent Humidity Resistance
- Low Cost
- Typical Reel Size 5000pcs

This range of axial chokes from ECM offer a common and highly cost effective answer to the majority of coiled inductor requirments. Available in four sizes ***EC22, EC24, EC36*** and ***EC46*** , they are specially designed to offer high 'Q' and perfect humidity resistance, these reliable and highly durable components are suitable for a wide range of comsumer electronic applications.

### COMPONENT OUTLINE




### DIMENSIONS (mm)

| TYPE | a | b | c | d∅ | e∅ |
|---|---|---|---|---|---|
| EC22 | 2.0 | 28 | 1.5 | 2.8 | 0.50 |
| EC24 | 4.0 | 28 | 2.0 | 3.0 | 0.50 |
| EC36 | 6.0 | 28 | 2.0 | 4.0 | 0.65 |
| EC46 | 6.0 | 28 | 2.0 | 5.0 | 0.65 |

**MARKING BANDS** = first significant figure, second significant figure, multiplier, tolerance (%)

| | Black | Brown | Red | Orange | Yellow | Green | Blue | Violet | Grey | White | Silver | Gold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Significant** | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | - | - |
| **Multiplier** | 1 | 10 | 100 | 1000 | 10000 | - | - | - | - | - | - | - |
| **Tolerance** | +/- 20% | - | - | - | - | - | - | - | - | - | +/-10% | +/- 5% |

ECM Electronics Limited, Penmaen House, Ashington, West Sussex, RH20 3JR, UK
Tel: +44(0)1903 892810: Fax: +44(0)1903 892738. Email: ecm@ecmelectronics.co.uk

Although we have attempted to accurately reflect the products we market. ECM reserve the right without prior notice to discontinue any product or make design changes we believe necessary.

# ECM Epoxy Coated Axial Chokes

| ECM Part | L (mH) | Tol % | Q Min. (**MHz) | SRF Min. (MHz) | $R_{DC}$ MAX (W) | $I_{DC}$ $I_N$ (mA) |
|---|---|---|---|---|---|---|
| **EC22 Series** | | | | | | |
| EC22T-R10 | 0.10 @25.2 MHz | K,M | 40 | 250 | 0.12 | 790 |
| EC22T-R12 | 0.12 @25.2 MHz | K,M | 40 | 230 | 0.14 | 790 |
| EC22T-R15 | 0.15 @25.2 MHz | K,M | 40 | 210 | 0.16 | 790 |
| EC22T-R18 | 0.18 @25.2 MHz | K,M | 40 | 190 | 0.18 | 745 |
| EC22T-R22 | 0.22 @25.2 MHz | K,M | 40 | 175 | 0.20 | 705 |
| EC22T-R27 | 0.27 @25.2 MHz | K,M | 40 | 160 | 0.22 | 670 |
| EC22T-R33 | 0.33 @25.2 MHz | K,M | 40 | 150 | 0.24 | 645 |
| EC22T-R39 | 0.39 @25.2 MHz | K,M | 50 | 150 | 0.27 | 605 |
| EC22T-R47 | 0.47 @25.2 MHz | K,M | 50 | 150 | 0.30 | 575 |
| EC22T-R56 | 0.56 @25.2 MHz | K,M | 50 | 150 | 0.34 | 540 |
| EC22T-R68 | 0.68 @25.2 MHz | K,M | 50 | 120 | 0.38 | 510 |
| EC22T-R82 | 0.82 @25.2 MHz | K,M | 40 | 120 | 0.43 | 480 |
| EC22T-1R0 | 1.0 @25.2 MHz | J,K | 40 | 120 | 0.46 | 465 |
| EC22T-1R2 | 1.2 @7.96 MHz | J,K | 30 | 100 | 0.52 | 435 |
| EC22T-1R5 | 1.5 @7.96 MHz | J,K | 30 | 80 | 0.57 | 415 |
| EC22T-1R8 | 1.8 @7.96 MHz | J,K | 30 | 66 | 0.60 | 405 |
| EC22T-2R2 | 2.2 @7.96 MHz | J,K | 30 | 60 | 0.65 | 390 |
| EC22T-2R7 | 2.7 @7.96 MHz | J,K | 30 | 54 | 0.73 | 370 |
| EC22T-3R3 | 3.3 @7.96 MHz | J,K | 40 | 36 | 0.82 | 345 |
| EC22T-3R9 | 3.9 @7.96 MHz | J,K | 40 | 32 | 0.90 | 330 |
| EC22T-4R7 | 4.7 @7.96 MHz | J,K | 40 | 30 | 1.00 | 315 |
| EC22T-5R6 | 5.6 @7.96 MHz | J,K | 40 | 38 | 1.10 | 300 |
| EC22T-6R8 | 6.8 @7.96 MHz | J,K | 40 | 27 | 1.20 | 285 |
| EC22T-8R2 | 8.2 @7.96 MHz | J,K | 40 | 26 | 1.30 | 275 |
| EC22T-100 | 10 @7.96 MHz | J,K | 40 | 24 | 1.40 | 265 |
| EC22T-120 | 12 @2.52 MHz | J,K | 40 | 22 | 1.50 | 255 |
| EC22T-150 | 15 @2.52 MHz | J,K | 40 | 19 | 2.30 | 245 |
| EC22T-180 | 18 @2.52 MHz | J,K | 50 | 18 | 2.40 | 225 |
| EC22T-220 | 22 @2.52 MHz | J,K | 50 | 17 | 2.90 | 210 |
| EC22T-270 | 27 @2.52 MHz | J,K | 50 | 15 | 3.00 | 200 |
| EC22T-330 | 33 @2.52 MHz | J,K | 50 | 14 | 4.80 | 160 |
| EC22T-390 | 39 @2.52 MHz | J,K | 50 | 12 | 5.30 | 150 |
| EC22T-470 | 47 @2.52 MHz | J,K | 50 | 11 | 5.80 | 145 |
| EC22T-560 | 56 @2.52 MHz | J,K | 50 | 10 | 7.40 | 140 |
| EC22T-680 | 68 @2.52 MHz | J,K | 50 | 9.5 | 8.25 | 130 |
| EC22T-820 | 82 @2.52 MHz | J,K | 50 | 9 | 9.50 | 100 |
| EC22T-101 | 100 @2.52 MHz | J,K | 50 | 7 | 14.50 | 95 |
| EC22T-121 | 120 @ 0.796 MHz | J,K | 50 | 6.5 | 16.00 | 85 |
| EC22T-151 | 150 @ 0.796 MHz | J,K | 30 | 5.5 | 18.50 | 80 |
| EC22T-181 | 180 @ 0.796 MHz | J,K | 30 | 5.2 | 20.00 | 75 |
| EC22T-221 | 220 @ 0.796 MHz | J,K | 30 | 4.7 | 22.00 | 70 |

**TOLERANCES J=5%; K= 10%; M=20%.**

ECM Electronics Limited, Penmaen House, Ashington, West Sussex, RH20 3JR, UK
Tel: +44(0)1903 892810: Fax: +44(0)1903 892738. Email: ecm@ecmelectronics.co.uk

Although we have attempted to accurately reflect the products we market. ECM reserve the right without prior notice to discontinue any product or make design changes we believe necessary.

Issue 1

# ECM Epoxy Coated Axial Chokes

| ECM Part | L (mH) | Tol % | Q Min. (**MHz) | SRF Min. (MHz) | $R_{DC}$ MAX (W) | $I_{DC}$ $I_N$ (mA) |
|---|---|---|---|---|---|---|
| **EC24 Series** | | | | | | |
| EC24T-R10 | 0.10 @25.2 MHz | K,M | 40 | 470 | 0.08 | 700 |
| EC24T-R12 | 0.12 @25.2 MHz | K,M | 40 | 450 | 0.08 | 700 |
| EC24T-R15 | 0.15 @25.2 MHz | K,M | 40 | 430 | 0.09 | 700 |
| EC24T-R18 | 0.18 @25.2 MHz | K,M | 40 | 410 | 0.10 | 700 |
| EC24T-R22 | 0.22 @25.2 MHz | K,M | 40 | 380 | 0.12 | 700 |
| EC24T-R27 | 0.27 @25.2 MHz | K,M | 40 | 360 | 0.15 | 680 |
| EC24T-R33 | 0.33 @25.2 MHz | K,M | 40 | 350 | 0.16 | 680 |
| EC24T-R39 | 0.39 @25.2 MHz | K,M | 40 | 320 | 0.18 | 680 |
| EC24T-R47 | 0.47 @25.2 MHz | K,M | 40 | 300 | 0.26 | 650 |
| EC24T-R56 | 0.56 @25.2 MHz | K,M | 40 | 280 | 0.38 | 500 |
| EC24T-R68 | 0.68 @25.2 MHz | K,M | 40 | 250 | 0.42 | 500 |
| EC24T-R82 | 0.82 @25.2 MHz | K,M | 40 | 200 | 0.55 | 450 |
| EC24T-1R0 | 1.0 @25.2 MHz | J,K | 40 | 180 | 0.12 | 700 |
| EC24T-1R2 | 1.2 @7.96 MHz | J,K | 40 | 165 | 0.18 | 700 |
| EC24T-1R5 | 1.5 @7.96 MHz | J,K | 45 | 150 | 0.20 | 700 |
| EC24T-1R8 | 1.8 @7.96 MHz | J,K | 50 | 125 | 0.23 | 655 |
| EC24T-2R2 | 2.2 @7.96 MHz | J,K | 50 | 85 | 0.25 | 630 |
| EC24T-2R7 | 2.7 @7.96 MHz | J,K | 50 | 80 | 0.28 | 595 |
| EC24T-3R3 | 3.3 @7.96 MHz | J,K | 50 | 75 | 0.30 | 575 |
| EC24T-3R9 | 3.9 @7.96 MHz | J,K | 45 | 65 | 0.32 | 555 |
| EC24T-4R7 | 4.7 @7.96 MHz | J,K | 45 | 45 | 0.35 | 530 |
| EC24T-5R6 | 5.6 @7.96 MHz | J,K | 45 | 36 | 0.40 | 500 |
| EC24T-6R8 | 6.8 @7.96 MHz | J,K | 40 | 30 | 0.45 | 470 |
| EC24T-8R2 | 8.2 @7.96 MHz | J,K | 40 | 28 | 0.55 | 425 |
| EC24T-100 | 10 @7.96 MHz | J,K | 40 | 22 | 0.72 | 370 |
| EC24T-120 | 12 @2.52 MHz | J,K | 45 | 20 | 0.80 | 350 |
| EC24T-150 | 15 @2.52 MHz | J,K | 50 | 16 | 0.88 | 335 |
| EC24T-180 | 18 @2.52 MHz | J,K | 50 | 15 | 1.00 | 315 |
| EC24T-220 | 22 @2.52 MHz | J,K | 50 | 13 | 1.20 | 285 |
| EC24T-270 | 27 @2.52 MHz | J,K | 50 | 11 | 1.35 | 270 |
| EC24T-330 | 33 @2.52 MHz | J,K | 50 | 10 | 1.50 | 255 |
| EC24T-390 | 39 @2.52 MHz | J,K | 50 | 9.5 | 1.70 | 240 |
| EC24T-470 | 47 @2.52 MHz | J,K | 60 | 8.5 | 2.30 | 205 |
| EC24T-560 | 56 @2.52 MHz | J,K | 60 | 7.5 | 2.60 | 195 |
| EC24T-680 | 68 @2.52 MHz | J,K | 60 | 6.5 | 3.20 | 185 |
| EC24T-820 | 82 @2.52 MHz | J,K | 60 | 6.0 | 3.50 | 175 |
| EC24T-101 | 100 @2.52 MHz | J,K | 60 | 5.5 | 3.80 | 165 |
| EC24T-121 | 120 @ 0.796 MHz | J,K | 60 | 5.4 | 3.80 | 160 |
| EC24T-151 | 150 @ 0.796 MHz | J,K | 60 | 4.75 | 4.40 | 150 |
| EC24T-181 | 180 @ 0.796 MHz | J,K | 60 | 4.35 | 5.00 | 140 |
| EC24T-221 | 220 @ 0.796 MHz | J,K | 60 | 4.0 | 5.70 | 130 |

**TOLERANCES J=5%; K= 10%; M=20%.**

**** = Test Frequency as specified in 'L' column**

ECM Electronics Limited, Penmaen House, Ashington, West Sussex, RH20 3JR, UK
Tel: +44(0)1903 892810: Fax: +44(0)1903 892738. Email: ecm@ecmelectronics.co.uk

Although we have attempted to accurately reflect the products we market. ECM reserve the right without prior notice to discontinue any product or make design changes we believe necessary.

Issue 1

# ECM Epoxy Coated Axial Chokes

| ECM Part | L (mH) | Tol % | Q Min. (**MHz) | SRF Min. (MHz) | $R_{DC}$ MAX (W) | $I_{DC}$ $I_N$ (mA) |
|---|---|---|---|---|---|---|
| **EC24 Series continued…** | | | | | | |
| EC24T-271 | 270 @ 0.796 MHz | J,K | 60 | 3.7 | 6.50 | 120 |
| EC24T-331 | 330 @ 0.796 MHz | J,K | 60 | 3.4 | 9.50 | 100 |
| EC24T-391 | 390 @ 0.796 MHz | J,K | 60 | 2.8 | 10.50 | 95 |
| EC24T-471 | 470 @ 0.796 MHz | J,K | 60 | 2.4 | 12.50 | 90 |
| EC24T-561 | 560 @ 0.796 MHz | J,K | 60 | 2.2 | 14.50 | 85 |
| EC24T-681 | 680 @ 0.796 MHz | J,K | 60 | 2.0 | 18.00 | 75 |
| EC24T-821 | 820 @ 0.796 MHz | J,K | 60 | 1.6 | 23.70 | 65 |
| EC24T-102 | 1000 @ 0.796 MHz | J,K | 60 | 1.15 | 30.00 | 60 |
| **EC36 Series** | | | | | | |
| EC36T-R10 | 0.10 @25.2 MHz | J,K | 50 | 470 | 0.04 | 900 |
| EC36T-R12 | 0.12 @25.2 MHz | J,K | 50 | 450 | 0.06 | 900 |
| EC36T-R15 | 0.15 @25.2 MHz | J,K | 50 | 430 | 0.07 | 700 |
| EC36T-R18 | 0.18 @25.2 MHz | J,K | 50 | 410 | 0.07 | 700 |
| EC36T-R22 | 0.22 @25.2 MHz | J,K | 50 | 380 | 0.08 | 700 |
| EC36T-R27 | 0.27 @25.2 MHz | J,K | 50 | 340 | 0.09 | 680 |
| EC36T-R33 | 0.33 @25.2 MHz | J,K | 50 | 300 | 0.10 | 680 |
| EC36T-R39 | 0.39 @25.2 MHz | J,K | 50 | 280 | 0.12 | 680 |
| EC36T-R47 | 0.47 @25.2 MHz | J,K | 50 | 250 | 0.16 | 650 |
| EC36T-R56 | 0.56 @25.2 MHz | J,K | 50 | 230 | 0.18 | 600 |
| EC36T-R68 | 0.68 @25.2 MHz | J,K | 50 | 210 | 0.22 | 550 |
| EC36T-R82 | 0.82 @25.2 MHz | J,K | 50 | 172 | 0.24 | 980 |
| EC36T-1R0 | 1.0 @25.2 MHz | J,K | 50 | 157 | 0.09 | 920 |
| EC36T-1R2 | 1.2 @7.96 MHz | J,K | 50 | 144 | 0.10 | 880 |
| EC36T-1R5 | 1.5 @7.96 MHz | J,K | 50 | 131 | 0.23 | 830 |
| EC36T-1R8 | 1.8 @7.96 MHz | J,K | 55 | 121 | 0.25 | 790 |
| EC36T-2R2 | 2.2 @7.96 MHz | J,K | 55 | 110 | 0.28 | 750 |
| EC36T-2R7 | 2.7 @7.96 MHz | J,K | 60 | 100 | 0.30 | 720 |
| EC36T-3R3 | 3.3 @7.96 MHz | J,K | 65 | 94 | 0.34 | 670 |
| EC36T-3R9 | 3.9 @7.96 MHz | J,K | 65 | 86 | 0.37 | 640 |
| EC36T-4R7 | 4.7 @7.96 MHz | J,K | 70 | 80 | 0.39 | 620 |
| EC36T-5R6 | 5.6 @7.96 MHz | J,K | 70 | 74 | 0.43 | 590 |
| EC36T-6R8 | 6.8 @7.96 MHz | J,K | 75 | 58 | 0.48 | 550 |
| EC36T-8R2 | 8.2 @7.96 MHz | J,K | 80 | 53 | 0.52 | 530 |
| EC36T-100 | 10 @7.96 MHz | J,K | 85 | 45 | 0.58 | 500 |
| EC36T-120 | 12 @2.52 MHz | J,K | 75 | 30 | 0.63 | 480 |
| EC36T-150 | 15 @2.52 MHz | J,K | 70 | 20 | 0.72 | 460 |
| EC36T-180 | 18 @2.52 MHz | J,K | 65 | 14 | 0.77 | 430 |
| EC36T-220 | 22 @2.52 MHz | J,K | 40 | 9.9 | 0.84 | 410 |
| EC36T-270 | 27 @2.52 MHz | J,K | 55 | 7.6 | 0.94 | 390 |

**TOLERANCES J=5%; K= 10%; M=20%.**

**** = Test Frequency as specified in 'L' column**

ECM Electronics Limited, Penmaen House, Ashington, West Sussex, RH20 3JR, UK
Tel: +44(0)1903 892810: Fax: +44(0)1903 892738. Email: ecm@ecmelectronics.co.uk

Although we have attempted to accurately reflect the products we market. ECM reserve the right without prior notice to discontinue any product or make design changes we believe necessary.

Issue 1

# ECM Epoxy Coated Axial Chokes

| ECM Part | L (mH) | Tol % | Q Min. (**MHz) | SRF Min. (MHz) | $R_{DC}$ MAX (W) | $I_{DC}$ $I_N$ (mA) |
|---|---|---|---|---|---|---|
| **EC36 Series continued…** | | | | | | |
| EC36T-330 | 33 @2.52 MHz | J,K | 55 | 6.3 | 1.03 | 370 |
| EC36T-390 | 39 @2.52 MHz | J,K | 50 | 6.3 | 1.12 | 350 |
| EC36T-470 | 47 @2.52 MHz | J,K | 45 | 6.3 | 1.22 | 340 |
| EC36T-560 | 56 @2.52 MHz | J,K | 40 | 6.2 | 1.34 | 320 |
| EC36T-680 | 68 @2.52 MHz | J,K | 40 | 5.7 | 1.47 | 305 |
| EC36T-820 | 82 @2.52 MHz | J,K | 35 | 5.3 | 1.62 | 290 |
| EC36T-101 | 100 @2.52 MHz | J,K | 30 | 4.8 | 1.80 | 275 |
| EC36T-121 | 120 @ 0.796 MHz | J,K | 70 | 3.8 | 3.70 | 185 |
| EC36T-151 | 150 @ 0.796 MHz | J,K | 70 | 3.5 | 4.20 | 175 |
| EC36T-181 | 180 @ 0.796 MHz | J,K | 70 | 3.3 | 4.60 | 165 |
| EC36T-221 | 220 @ 0.796 MHz | J,K | 70 | 3.0 | 5.10 | 155 |
| EC36T-271 | 270 @ 0.796 MHz | J,K | 65 | 2.8 | 5.80 | 145 |
| EC36T-331 | 330 @ 0.796 MHz | J,K | 65 | 2.6 | 6.40 | 137 |
| EC36T-391 | 390 @ 0.796 MHz | J,K | 65 | 2.4 | 7.00 | 133 |
| EC36T-471 | 470 @ 0.796 MHz | J,K | 60 | 2.25 | 7.70 | 126 |
| EC36T-561 | 560 @ 0.796 MHz | J,K | 60 | 2.1 | 8.50 | 120 |
| EC36T-681 | 680 @ 0.796 MHz | J,K | 55 | 1.95 | 9.40 | 113 |
| EC36T-821 | 820 @ 0.796 MHz | J,K | 55 | 1.85 | 12.00 | 100 |
| EC36T-102 | 1000 @ 0.796 MHz | J,K | 50 | 1.4 | 17.40 | 100 |
| **EC46 Series** | | | | | | |
| EC46T-102 | 1.0 @ 252 MHz | J,K | 90 | - | 8 | 233 |
| EC46T-122 | 1.2 @ 252 MHz | J,K | 90 | - | 9 | 215 |
| EC46T-152 | 1.5 @ 252 MHz | J,K | 90 | - | 10 | 200 |
| EC46T-182 | 1.8 @ 252 MHz | J,K | 90 | - | 11 | 188 |
| EC46T-222 | 2.2 @ 252 MHz | J,K | 90 | - | 14 | 176 |
| EC46T-272 | 2.7 @ 252 MHz | J,K | 90 | - | 18 | 170 |
| EC46T-332 | 3.3 @ 252 MHz | J,K | 90 | - | 22 | 162 |
| EC46T-392 | 3.9 @ 252 MHz | J,K | 90 | - | 26 | 156 |
| EC46T-472 | 4.7 @ 252 MHz | J,K | 90 | - | 30 | 147 |
| EC46T-562 | 5.6 @ 252 MHz | J,K | 70 | - | 34 | 140 |
| EC46T-682 | 6.8 @ 252 MHz | J,K | 70 | - | 45 | 140 |
| EC46T-822 | 8.2 @ 252 MHz | J,K | 50 | - | 60 | 137 |
| EC46T-103 | 10 @ 252 MHz | J,K | 50 | - | 70 | 130 |
| EC46T-123 | 12 @ 79.6 MHz | J,K | 50 | - | 82 | 117 |
| EC46T-153 | 15 @ 79.6 MHz | J,K | 50 | - | 89 | 108 |
| EC46T-183 | 18 @ 79.6 MHz | J,K | 40 | - | 140 | 100 |
| EC46T-223 | 22 @ 79.6 MHz | J,K | 40 | - | 170 | 93 |
| EC46T-253 | 25 @ 79.6 MHz | J,K | 40 | - | 185 | 88 |
| EC46T-273 | 27 @ 79.6 MHz | J,K | 40 | - | 210 | 82 |

**TOLERANCES J=5%; K= 10%; M=20%.**

**** = Test Frequency as specified in 'L' column**

ECM Electronics Limited, Penmaen House, Ashington, West Sussex, RH20 3JR, UK
Tel: +44(0)1903 892810: Fax: +44(0)1903 892738. Email: ecm@ecmelectronics.co.uk

Although we have attempted to accurately reflect the products we market. ECM reserve the right without prior notice to discontinue any product or make design changes we believe necessary.

Issue 1

# ECM Epoxy Coated Axial Chokes

## EC46 Series continued…

| ECM Part | L (mH) | Tol % | Q Min. (**MHz) | SRF Min. (MHz) | $R_{DC}$ MAX (W) | $I_{DC}$ $I_N$ (mA) |
|---|---|---|---|---|---|---|
| EC46T-333K | 33 @ 79.6 MHz | J,K | 30 | - | 240 | 75 |
| EC46T-393K | 39 @ 79.6 MHz | J,K | 30 | - | 250 | 60 |
| EC46T-473K | 47 @ 79.6 MHz | J,K | 30 | - | 340 | 60 |
| EC46T-563K | 56 @ 79.6 MHz | J,K | 30 | - | 390 | 55 |
| EC46T-683K | 68 @ 79.6 MHz | J,K | 30 | - | 440 | 40 |
| EC46T-823K | 82 @ 79.6 MHz | J,K | 30 | - | 550 | 30 |
| EC46T-104K | 100 @ 79.6 MHz | J,K | 30 | - | 640 | 18 |

**TOLERANCES J=5%; K= 10%; M=20%.**
**** = Test Frequency as specified in 'L' column**

ECM Electronics Limited, Penmaen House, Ashington, West Sussex, RH20 3JR, UK
Tel: +44(0)1903 892810: Fax: +44(0)1903 892738. Email: ecm@ecmelectronics.co.uk

Although we have attempted to accurately reflect the products we market. ECM reserve the right without prior notice to discontinue any product or make design changes we believe necessary.