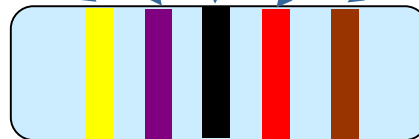


## Colour Code used on Welwyn Band-marked Resistors

Through-hole and MELF style resistors with colour band marking use the following colour code (reference IEC60062):

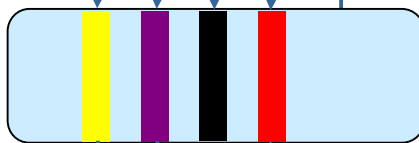
Colour	Value 1	Value 2	Value 3	Multiplier	Tolerance	
Silver				x 0.01	10%	K
Gold				x 0.1	5%	J
Black	0	0	0	x 1		
Brown	1	1	1	x 10	1%	F
Red	2	2	2	x 100	2%	G
Orange	3	3	3	x 1K		
Yellow	4	4	4	x 10K		
Green	5	5	5	x 100K	0.5%	D
Blue	6	6	6	x 1M	0.25%	C
Violet	7	7	7	x 10M	0.1%	B
Grey	8	8	8	x 100M	0.05%	A
White	9	9	9	x 1G		
Blank					20%	M

Example 1  
5-Band Marking  
E24/E96 values



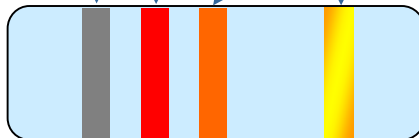
**4 7 0 x100 1%**  
= 47K 1%  
E.g. MFR4 E96

Example 2  
4-Band Marking  
E24/E96 values  
without tolerance



**4 7 0 x100**  
= 47K  
E.g. WRM0204 E96

Example 3  
4-Band Marking  
E24 values



**8 2 x1K 5%**  
= 82K 5%  
E.g. WMO3S E24

## Marking Codes used on Welwyn Chip Resistors

Where space allows, chip resistors are marked with value in 3 or 4 characters. The coding is 2 or 3 digits followed by one multiplier expressing the number of zeros. For example **472** = 4700 ohms = 4K7, **1331** = 1330 ohms = 1K33, **330** = 33 ohms = 33R (N.B. *not* 330R). Lower values use "R" as a decimal point. For example **4R7** = 4.7 ohms, **34R8** = 34.8 ohms.

For E96 values on 0603, EIA-96 marking code is 2 digits + 1 letter. Example: **07B** = 1K15

CODE	Letter							CODE	Letter							
	Digits	S or Y	R or X	A	H or B	C	D		E	Digits	S or Y	R or X	A	H or B	C	D
<b>01</b>	1R0	10R	100R	1K0	10K	100K	1M0	<b>49</b>	3R16	31R6	316R	3K16	31K6	316K	3M16	
<b>02</b>	1R02	10R2	102R	1K02	10K2	102K	1M02	<b>50</b>	3R24	32R4	324R	3K24	32K4	324K	3M24	
<b>03</b>	1R05	10R5	105R	1K05	10K5	105K	1M05	<b>51</b>	3R32	33R2	332R	3K32	33K2	332K	3M32	
<b>04</b>	1R07	10R7	107R	1K07	10K7	107K	1M07	<b>52</b>	3R4	34R	340R	3K4	34K	340K	3M4	
<b>05</b>	1R1	11R	110R	1K1	11K	110K	1M1	<b>53</b>	3R48	34R8	348R	3K48	34K8	348K	3M48	
<b>06</b>	1R13	11R3	113R	1K13	11K3	113K	1M13	<b>54</b>	3R57	35R7	357R	3K57	35K7	357K	3M57	
<b>07</b>	1R15	11R5	115R	1K15	11K5	115K	1M15	<b>55</b>	3R65	36R5	365R	3K65	36K5	365K	3M65	
<b>08</b>	1R18	11R8	118R	1K18	11K8	118K	1M18	<b>56</b>	3R74	37R4	374R	3K74	37K4	374K	3M74	
<b>09</b>	1R21	12R1	121R	1K21	12K1	121K	1M21	<b>57</b>	3R83	38R3	383R	3K83	38K3	383K	3M83	
<b>10</b>	1R24	12R4	124R	1K24	12K4	124K	1M24	<b>58</b>	3R92	39R2	392R	3K92	39K2	392K	3M92	
<b>11</b>	1R27	12R7	127R	1K27	12K7	127K	1M27	<b>59</b>	4R02	40R2	402R	4K02	40K2	402K	4M02	
<b>12</b>	1R3	13R	130R	1K3	13K	130K	1M3	<b>60</b>	4R12	41R2	412R	4K12	41K2	412K	4M12	
<b>13</b>	1R33	13R3	133R	1K33	13K3	133K	1M33	<b>61</b>	4R22	42R2	422R	4K22	42K2	422K	4M22	
<b>14</b>	1R37	13R7	137R	1K37	13K7	137K	1M37	<b>62</b>	4R32	43R2	432R	4K32	43K2	432K	4M32	
<b>15</b>	1R4	14R	140R	1K4	14K	140K	1M4	<b>63</b>	4R42	44R2	442R	4K42	44K2	442K	4M42	
<b>16</b>	1R43	14R3	143R	1K43	14K3	143K	1M43	<b>64</b>	4R53	45R3	453R	4K53	45K3	453K	4M53	
<b>17</b>	1R47	14R7	147R	1K47	14K7	147K	1M47	<b>65</b>	4R64	46R4	464R	4K64	46K4	464K	4M64	
<b>18</b>	1R5	15R	150R	1K5	15K	150K	1M5	<b>66</b>	4R75	47R5	475R	4K75	47K5	475K	4M75	
<b>19</b>	1R54	15R4	154R	1K54	15K4	154K	1M54	<b>67</b>	4R87	48R7	487R	4K87	48K7	487K	4M87	
<b>20</b>	1R58	15R8	158R	1K58	15K8	158K	1M58	<b>68</b>	4R99	49R9	499R	4K99	49K9	499K	4M99	
<b>21</b>	1R62	16R2	162R	1K62	16K2	162K	1M62	<b>69</b>	5R11	51R1	511R	5K11	51K1	511K	5M11	
<b>22</b>	1R65	16R5	165R	1K65	16K5	165K	1M65	<b>70</b>	5R23	52R3	523R	5K23	52K3	523K	5M23	
<b>23</b>	1R69	16R9	169R	1K69	16K9	169K	1M69	<b>71</b>	5R36	53R6	536R	5K36	53K6	536K	5M36	
<b>24</b>	1R74	17R4	174R	1K74	17K4	174K	1M74	<b>72</b>	5R49	54R9	549R	5K49	54K9	549K	5M49	
<b>25</b>	1R78	17R8	178R	1K78	17K8	178K	1M78	<b>73</b>	5R62	56R2	562R	5K62	56K2	562K	5M62	
<b>26</b>	1R82	18R2	182R	1K82	18K2	182K	1M82	<b>74</b>	5R76	57R6	576R	5K76	57K6	576K	5M76	
<b>27</b>	1R87	18R7	187R	1K87	18K7	187K	1M87	<b>75</b>	5R9	59R	590R	5K9	59K	590K	5M9	
<b>28</b>	1R91	19R1	191R	1K91	19K1	191K	1M91	<b>76</b>	6R04	60R4	604R	6K04	60K4	604K	6M04	
<b>29</b>	1R96	19R6	196R	1K96	19K6	196K	1M96	<b>77</b>	6R19	61R9	619R	6K19	61K9	619K	6M19	
<b>30</b>	2R0	20R	200R	2K0	20K	200K	2M0	<b>78</b>	6R34	63R4	634R	6K34	63K4	634K	6M34	
<b>31</b>	2R05	20R5	205R	2K05	20K5	205K	2M05	<b>79</b>	6R49	64R9	649R	6K49	64K9	649K	6M49	
<b>32</b>	2R1	21R	210R	2K1	21K	210K	2M1	<b>80</b>	6R65	66R5	665R	6K65	66K5	665K	6M65	
<b>33</b>	2R15	21R5	215R	2K15	21K5	215K	2M15	<b>81</b>	6R81	68R1	681R	6K81	68K1	681K	6M81	
<b>34</b>	2R21	22R1	221R	2K21	22K1	221K	2M21	<b>82</b>	6R98	69R8	698R	6K98	69K8	698K	6M98	
<b>35</b>	2R26	22R6	226R	2K26	22K6	226K	2M26	<b>83</b>	7R15	71R5	715R	7K15	71K5	715K	7M15	
<b>36</b>	2R32	23R2	232R	2K32	23K2	232K	2M32	<b>84</b>	7R32	73R2	732R	7K32	73K2	732K	7M32	
<b>37</b>	2R37	23R7	237R	2K37	23K7	237K	2M37	<b>85</b>	7R5	75R	750R	7K5	75K	750K	7M5	
<b>38</b>	2R43	24R3	243R	2K43	24K3	243K	2M43	<b>86</b>	7R68	76R8	768R	7K68	76K8	768K	7M68	
<b>39</b>	2R49	24R9	249R	2K49	24K9	249K	2M49	<b>87</b>	7R87	78R7	787R	7K87	78K7	787K	7M87	
<b>40</b>	2R55	25R5	255R	2K55	25K5	255K	2M55	<b>88</b>	8R06	80R6	806R	8K06	80K6	806K	8M06	
<b>41</b>	2R61	26R1	261R	2K61	26K1	261K	2M61	<b>89</b>	8R25	82R5	825R	8K25	82K5	825K	8M25	
<b>42</b>	2R67	26R7	267R	2K67	26K7	267K	2M67	<b>90</b>	8R45	84R5	845R	8K45	84K5	845K	8M45	
<b>43</b>	2R74	27R4	274R	2K74	27K4	274K	2M74	<b>91</b>	8R66	86R6	866R	8K66	86K6	866K	8M66	
<b>44</b>	2R8	28R	280R	2K8	28K	280K	2M8	<b>92</b>	8R87	88R7	887R	8K87	88K7	887K	8M87	
<b>45</b>	2R87	28R7	287R	2K87	28K7	287K	2M87	<b>93</b>	9R09	90R9	909R	9K09	90K9	909K	9M09	
<b>46</b>	2R94	29R4	294R	2K94	29K4	294K	2M94	<b>94</b>	9R31	93R1	931R	9K31	93K1	931K	9M31	
<b>47</b>	3R01	30R1	301R	3K01	30K1	301K	3M01	<b>95</b>	9R53	95R3	953R	9K53	95K3	953K	9M53	
<b>48</b>	3R09	30R9	309R	3K09	30K9	309K	3M09	<b>96</b>	9R76	97R6	976R	9K76	97K6	976K	9M76	

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