fixed resistors
metal film-lacquered

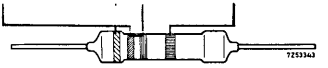
MR25 MR30 MR52

Resistance ranges	from 1 Ω to 1 MΩ E24, E96 and E192 series
Resistance tolerance	± 0,5, ± 1, ± 2, ± 5%
Temperature coefficient	± 50, ± 100, ± 200 ppm/ °C
Abs. max. dissipation at	MR25 0,4 W
T_{amb} = 70 °C	MR30 0,5 W
	MR52 0,75W
Basic specification	IEC 115-1
Climatic category (IEC68)	55/155/56
Stability after load	see nomogram

for E96 series
E192 series

colour	first digits of resistance value	multiplier	tolerance
black	0	1 x	
brown	1	10 x	± 1%
red	2	100 x	± 2%
orange	3	1 000 x	
yellow	4	10 000 x	
green	5	100 000 x	± 0,5%
blue	6		
violet	7		
grey	8		
white	9		
silver		0,01 x	
gold		0,1 x	± 5%

for E24 series



style	limiting voltage (r.m.s) V	rated dissipation at 70 °C W	resistance range	tolerance ± %	series	temperature coefficient ± ppm/ °C	catalogue no. 2322 followed by
MR25	250	**0,4**	4,99 Ω - 681 kΩ	0,5	E192	50 [1]	151 7 ....
	250		4,99 Ω - 681 kΩ	1	E96 + E24	50 [1]	151 5 ....
	250		1 Ω - 680 kΩ	2	E24	100	151 4 ....
	250		1 Ω - 680 kΩ	5	E24	200	151 6 ....
MR25	250		4,99 Ω - 681 kΩ	1	E96	50 [1]	151 2 ....
on reel	250		1 Ω - 680 kΩ	2	E24	100	151 1 ....
	250		1 Ω - 680 kΩ	5	E24	200	151 3 ....
MR30	350	**0,5**	4,99 Ω - 1 MΩ	0,5	E192	50 [1]	152 7 ....
	350		4,99 Ω - 1 MΩ	1	E96 + E24	50 [1]	152 5 ....
	350		5,1 Ω - 1 MΩ	2	E24	100	152 4 ....
	350		5,1 Ω - 1 MΩ	5	E24	200	152 6 ....
MR30	350		4,99 Ω - 1 MΩ	1	E96	50 [1]	152 2 ....
on reel	350		5,1 Ω - 1 MΩ	2	E24	100	152 1 ....
	350		5,1 Ω - 1 MΩ	5	E24	200	152 3 ....
MR52	500	**0,75**	4,99 Ω - 1 MΩ	1	E96	100	153 5 ....

[1]) For values ⩽ 49,9 Ω: 100 ppm/ °C.

Composition of the catalogue no. 2322 ....

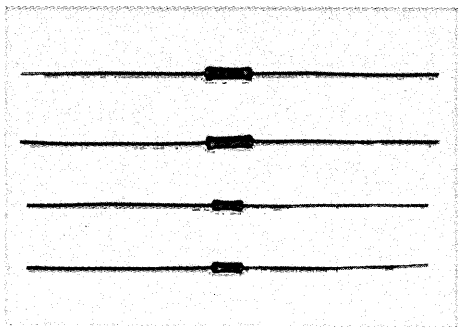
Style code
see table

Tolerance code
7 for ± 0,5%
2 or 5 for ± 1%
1 or 4 for ± 2%
3 or 6 for ± 5%

Resistance code: first three figures of the resistance value followed by

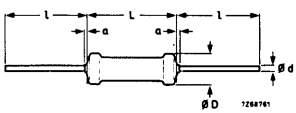
8 for R of 1 to 9,76 Ω
9 for R of 10 to 97,6 Ω
1 for R of 100 to 976 Ω
2 for R of 1 to 9,76 kΩ
3 for R of 10 to 97,6 kΩ
4 for R of 100 to 976 kΩ
5 for R of 1 MΩ

Example
The catalogue no. of an MR30 resistor of 3650 Ω with a tolerance of 1% is 2322 152 53652.



A professional style of resistor that is also widely used in consumer equipment. It meets the high standards required for test and measuring equipment and for communications equipment etc. The lacquer is non-inflammable and is resistant to all the usual cleansing solvents.

style	D_{max}	L_{max}	l	d	a_{max}
MR25	2,5	6,5	28 ± 2	0,6	1
MR30	3	10	28 ± 2	0,6	1
MR52	5,2	16,5	38 ± 3	0,6	1



Nomogram to find style or stability

Example
What is the stability of a 1 kΩ metal film resistor, style MR25, operating at 0,33 W in an ambient of 60 °C? Find 0,33 W on MR25 style column. Follow the line right, down, left, to where it intersects the 1000 h line.
ΔR/R is 0,28% over 1000 working hours.
Use the reverse procedure to find right style for a given stability and dissipation.