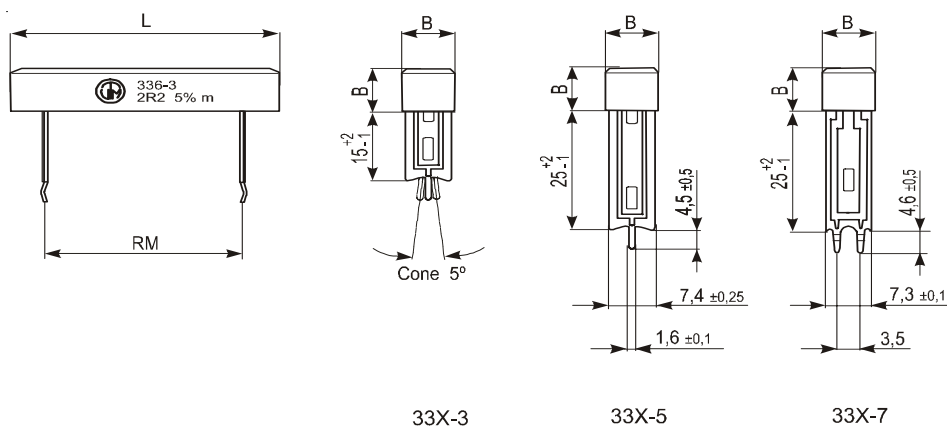


Power Wirewound Resistors,
ceramic case, radial

Specifications

Type		KWP 330-3/5/7	KWP 331-3/5/7	KWP 332-3/5/7	KWP 333-3/5-7	KWP 335-3/5/7	KWP 336-3/5/7	KWP 337-3/5/7	KWP 338-3/5/7
Power rating P_{25} P_{70}	W	3,0 2,0	4,0 2,2	5,0 2,5	7,0 3,0	9,0 4,5	10,0 4,5	15,0 5,5	20,0 8,0
Resistance range	Ω	0R2... 2K4	0R22... 3K	0R3... 3K6	0R43... 4K7	0R56... 5K6	0R68... 6K8	0R62... 7K5	0R91... 10K
E-Series		E 24 (5%). E 12 (10%)							
Tolerances	%	± 5 , ± 10							
Temperature coefficient	$10^{-6} \cdot K^{-1}$	- 80 ... + 500 depends on value							
max. cont. work. voltage	V_{RMS}	$\sqrt{P_{70} \cdot R}$ for all styles							
Insulation voltage (1min.)	V_{RMS}	2000							
Insulation resistance	Ω	$> 10^4 M$							
Derating linear	$^{\circ}C$	linear 70 ... 275 (0W)							
Climatic category		55/200/56							
Temperature range	$^{\circ}C$	- 55 ... 275							
Thermal resistance	KW^{-1}	37	35	35	35	35	30	20	14
Failure rate (Total, ϑ_o , max., 60% conf. lev.)	$10^{-9} \cdot h^{-1}$	ca. 100 depends on value							
Endurance (P_{70} , 70 $^{\circ}C$, 1000h)	$\left[\frac{\Delta R}{R}\right] \%$	$\pm 3,0$ average							
Damp heat, steady state (40 $^{\circ}C$, 93% r.h., 56d)	$\left[\frac{\Delta R}{R}\right] \%$	$\pm 2,0$							
Resistance to soldering heat (360 $^{\circ}C$, 3,5s)	$\left[\frac{\Delta R}{R}\right] \%$	$\pm 0,5$							
Solderability	s	2,5 s Flowtime; solderglobule test IEC 60068-2-20-T							
Marking		Printed in clear							

Dimensions in mm



Type	L	B	RM
KWP330-3/5/7	23	10	10
KWP331-3/5/7	25	10	12,5
KWP332-3/5/7	28	10	15
KWP333-3/5/7	35	10	22,5
KWP335-3/5/7	43	10	30
KWP336-3/5/7	48	10	35
KWP337-3/5/7	50	13	32,5
KWP338-3/5/7	65	13	47,5

Packaging:

Type	Packaging	Pieces	Pack.-Code
KWP330-3/5/7	bulk	144	B
KWP331-3/5/7	bulk	100	B
KWP332-3	bulk	112	B
KWP332-5/7	bulk	128	B
KWP333-3	bulk	120	B
KWP333-5/7	bulk	100	B
KWP335-3	bulk	150	B
KWP335-5/7	bulk	105	B
KWP336-3	bulk	150	B
KWP336-5	bulk	120	B
KWP336-7	bulk	100	B
KWP337-3	bulk	128	B
KWP337-5/7	bulk	50	B
KWP338-3	bulk	100	B
KWP338-5/7	bulk	48	B

Ordering example:

KWP333-3
Type5
ToleranceB
Pack.-Code0R43
R-Value

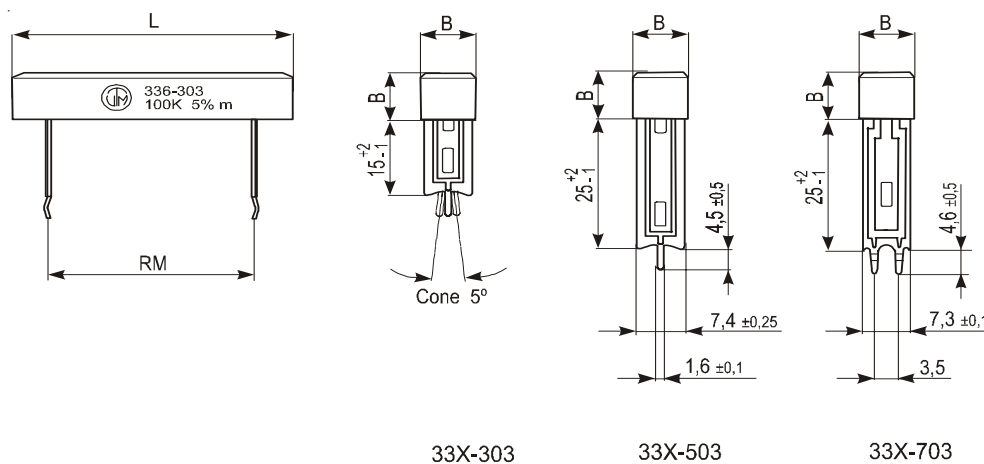
Revision 200807

Power Resistors, Metox Element
ceramic case, radial

Specifications

Type		KWP 330-303 330-503 330-703	KWP 331-303 331-503 331-703	KWP 332-303 332-503 332-703	KWP 333-303 333-503 333-703	KWP 334-303 334-503 334-703	KWP 336-303 336-503 336-703
Power rating P_{25} P_{70}	W	3,0 2,0	4,0 2,2	5,0 2,5	7,0 3,0	9,0 4,5	10,0 4,5
Resistance range	Ω	390R... 100K	680R... 100K	680R... 100K	1K... 100K	1K... 100K	1K... 100K
E-Series	%	E 24 (5%)					
Temperature coefficient	$10^{-6} \cdot K^{-1}$	± 250 ppm					
max. cont. work. voltage	V_{RMS}	350		500			
Insulation voltage (1min.)	V_{RMS}	2000					
Insulation resistance	Ω	$> 10^4 M$					
Derating linear	$^{\circ}C$	linear 70 ... 235 (0W)					
Climatic category		55/155/21					
Temperature range	$^{\circ}C$	- 55 ... 235					
Thermal resistance	KW^{-1}	37	35	35	35	35	30
Failure rate (Total, ϑ_o , max., 60% conf. lev.)	$10^{-9} \cdot h^{-1}$	1					
Endurance (P_{70} , 70 $^{\circ}C$, 1000h)	$\left[\frac{\Delta R}{R}\right] \%$	± 5 average					
Damp heat, steady state (40 $^{\circ}C$, 93% r.h., 56d)	$\left[\frac{\Delta R}{R}\right] \%$	± 5					
Resistance to soldering heat (360 $^{\circ}C$, 3,5s)	$\left[\frac{\Delta R}{R}\right] \%$	± 1					
Solderability	s	2,5 Flowtime; solderglobule test IEC 60068-2-20-T					
Marking		Printed in clear					

Dimensions in mm



Type	L	B	RM
KWP330-303/503/703	23	10	10
KWP331-303/503/703	25	10	12,5
KWP332-303/503/703	28	10	15
KWP333-303/503/703	35	10	22,5
KWP334-303/503/703	43	10	32,5
KWP336-303/503/703	48	10	35

Packaging:

Type	Packaging	Pieces	Pack.-Code
KWP330-303/503/703	bulk	144	B
KWP331-303/503/703	bulk	100	B
KWP332-303	bulk	112	B
KWP332-503/703	bulk	128	B
KWP333-303	bulk	120	B
KWP333-503/703	bulk	100	B
KWP334-303	bulk	150	B
KWP334-503/703	bulk	105	B
KWP336-303	bulk	150	B
KWP336-503	bulk	120	B
KWP336-703	bulk	100	B

Ordering example:

KWP336-303 5
Type ToleranceB
Pack.-Code100K
R-Value

Revision 200807