

KCS Series Datasheet

Power Wirewound Resistors | Axial | Fiber Glass Core
Flame retardant coating

APPLICATIONS



Industrial



Power & Energy

FEATURES

Flame retardant coating

Noise suppressor version available

Pulse version available

preforming available

RoHS & REACH Compliant

ORDERING CODE - Example

New SAP Part Nr.:

KCS	100	J	T	-	73-	100R	AA
Serie	Power rating	Tol. J = ±5% K = ±10%	Pack-Code T = Tape (ammo pack)	TCR - Base on spec.	Forming type 73- Inner Taping dimension	R Value	Special AA = Standard

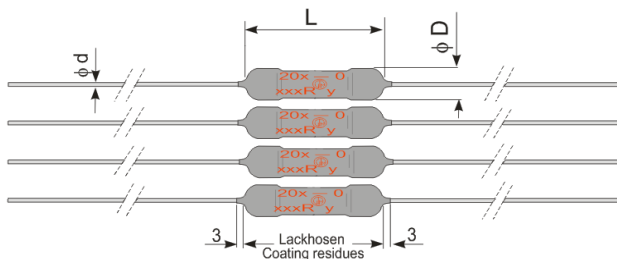
Historical VTM Part Nr.:

KC200 - 0	10	T	100R
Type	Tol. ±5% = J ±10% = K	Pack-Code T = Tape (ammo pack)	R Value

ELECTRICAL SPECIFICATIONS

Type		KCS100	KCS200	KCS300
Historical Part Number	AXIAL	KC200-0	KC202-0	KC204-0
Nominal Power Rating P ₇₀	[W]	1	2	3
Resistance Range	Min. [Ω]	Please check the table below		
	Max. [Ω]	9K1	20K	30K
E-Series (preferred)		E24 = 5% ; E12 = 10% (Other upon request)		
Tolerances	±[%]	J = 5% ; K = 10%		
Temperature Coefficient	±[10 ⁻⁶ K ⁻¹]	Depends on the value, please check the table below		
Working Temperature Range	[°C]	-55 ... +350		
Thermal Resistance	[KW ⁻¹]	280	140	93
Max. Working Voltage	[V] _{RMS}	$\sqrt{P_{70} \times R}$		
Dielectric Withstanding Voltage IEC115-1 clause 4.7 (1[min])	[V] _{RMS}	75		

DIMENSIONS [mm]



Type	Historical P/N:	L ^{+2,0} / _{-1,0}	Ø D ±0,5	Ø d ±0,05
KCS100	KC200 - 0	16,0	4,5	0,80
KCS200	KC202 - 0	24,0		
KCS300	KC204 - 0	32,0		

KCS Series Datasheet

PERFORMANCE DATA

Type		KCS100	KCS200	KCS300
Historical Part Number	AXIAL	KC200-0	KC202-0	KC204-0
Derating Linear	[°C]	70...350 (0W)		
Climatic Category		55/200/56		
Failure Rate <i>(Total, θ_{σ}, max, 60[%] cont. lev.)</i>	[10 ⁻⁹ h ⁻¹]	appr. 100 depends on value		
Endurance <i>IEC60115-1 clause 4.25 (P_{70}, @ 70[°C], 1000[h])</i>	±[%]	3,0		
Damp Heat, Steady State <i>IEC60115-1 clause 4.24 (40[°C], 93[% r.h.], 56[d])</i>	±[%]	2,0		
Climatic Sequence <i>IEC60115-1 clause 4.23</i>	±[%]	2,0		
Resistance to Soldering Heat <i>IEC60115-1 clause 4.18 (260^{±5}[°C], 10^{±1}[s])</i>	±[%]	0,2		
Terminal Strength	±[%]	1,0		
Terminal Tensile Strength	[N]	50		
Solderability <i>IEC60068-2-20 (245^{±5}[°C] 3^{±0,5}[s])</i>		Solder bath method (> 95% coverage)		
Marking <i>IEC60062</i>		Printed in clear		

ELECTRICAL SPECIFICATIONS

RESISTANCE RANGE (minimum)

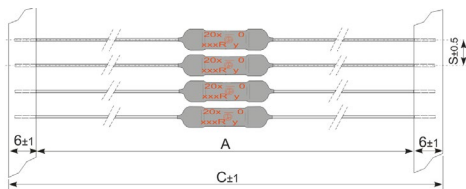
New P/Nr. Type	Historical P/N:	± 10 [%]	± 5 [%]
KCS100	KC200 - 0	OR056	OR1
KCS200	KC202 - 0	OR075	OR1
KCS300	KC204 - 0	OR33	OR33

TEMPERATURE COEFFICIENT

New P/Nr. Type	Historical P/N:	400 ± 50 ppm/K		-20 ± 60 ppm/K		0 ± 10 ppm/K	
KCS100	KC200 - 0	≥ OR056	≤ OR2	≥ OR22	≤ 300R	≥ 330R	≤ 9K1
KCS200	KC202 - 0	≥ OR075	≤ OR3	≥ OR33	≤ 470R	≥ 510R	≤ 20K
KCS300	KC204 - 0	≥ OR33	≤ OR68	≥ OR75	≤ 910R	≥ 1K	≤ 30K

PACKAGING

The standard packaging for KCS in axial type is taped, dimensions below.



Type	Historical P/N:	Pack Code	Pieces	Forming Type <i>(Inner Taping dim.)</i>	A	C	S
KCS100	KC200 - 0	T = Taped Ammo pack	1000	73-	73	85	5
KCS200	KC202 - 0		1000		73	85	5
KCS300	KC204 - 0		1000		73	85	5

ALTERNATIVE LEAD CONFIGURATIONS

This type KCS is also available in a different pre-forming, as shown below, other's upon request.

THOUGH HOLE VERSION

Axial Goal Post (AG-)	Axial Goal Post Kink (AK-)	Radial (RD-)	Radial 2 Kink (RK-)