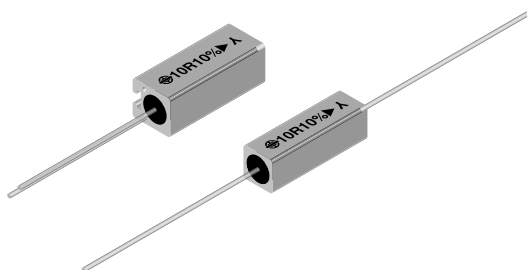


Wirewound Resistors in Ceramic Case



FEATURES

- Fiberglass core, ceramic case
- Fireproof inorganic construction
- Axial or radial leaded
- Fusing styles available as style KKE...Si

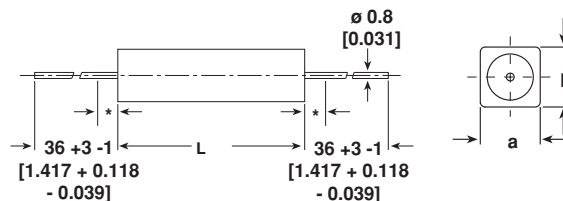
STANDARD ELECTRICAL SPECIFICATIONS

MODEL	POWER RATING $P_{40^{\circ}\text{C}}$ W	LIMITING VOLTAGE V	RESISTANCE RANGE E12/E 24			
			TOLERANCE $\pm 10\%$		TOLERANCE $\pm 10\%, \pm 5\%$	
			TC + 400 ± 50 ppm/K	TC + 400 ± 50 ppm/K	TC + 0 ± 40 ppm/K	TC + 0 ± 10 ppm/K
KKA 4	4	125	R056 - R091	R10 - R20	R22 - 300R	330R - 9K1
KKA 5	5	185	R075 - R12	R15 - R30	R33 - 470R	510R - 15K
KKA 7	7	250	R11 - R30	R33 - R68	R75 - 910R	1K0 - 33K
KKA 9	9	250	R11 - R30	R33 - R68	R75 - 910R	1K0 - 33K
KKA 11	11	350	R15 - R47	R51 - 1R0	1R1 - 1K3	1K5 - 47K
KKA 17	17	500	R27 - R82	R91 - 1R6	1R8 - 2K4	2K7 - 82K
KKE 4	4	125	R056 - R091	R10 - R20	R22 - 300R	330R - 9K1
KKE 7	7	250	R075 - R12	R15 - R30	R33 - 470R	510R - 15K
KKE 9	9	250	R11 - R30	R33 - R68	R75 - 910R	1K0 - 33K
KKE 11	11	350	R15 - R47	R51 - 1R0	1R1 - 1K3	1K5 - 47K
KKE 17	17	500	R27 - R82	R91 - 1R6	1R8 - 2K4	2K7 - 82K
KKE 7 Si	4	165	R075 - R13	R15 - 12K		Only $\pm 5\%$
KKE 9 Si	5.5	250	R11 - R30	R33 - 33K		Only $\pm 5\%$
KKE 11 Si	7	350	R28 - R47	R51 - 47K		Only $\pm 5\%$
KKE 17 Si	10	500	R27 - R82	R91 - 82K		Only $\pm 5\%$

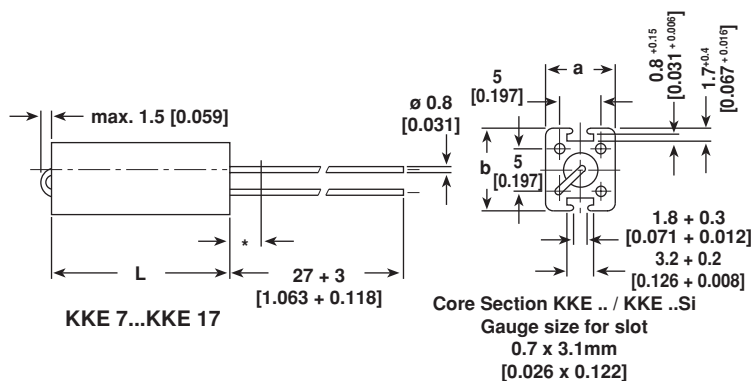
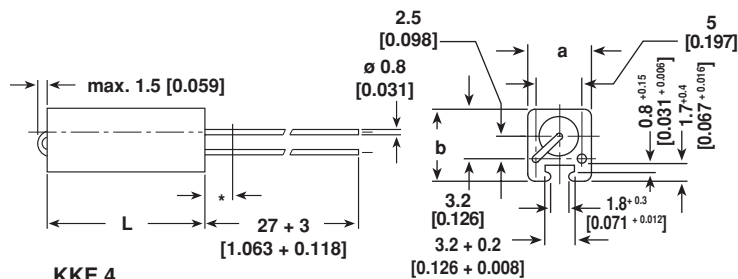
ORDERING INFORMATION

KKA 4	100R	$\pm 5\%$	WM 50
MODEL	RESISTANCE VALUE Ω	TOLERANCE $\pm \%$	CLASS (TC)

DIMENSIONS

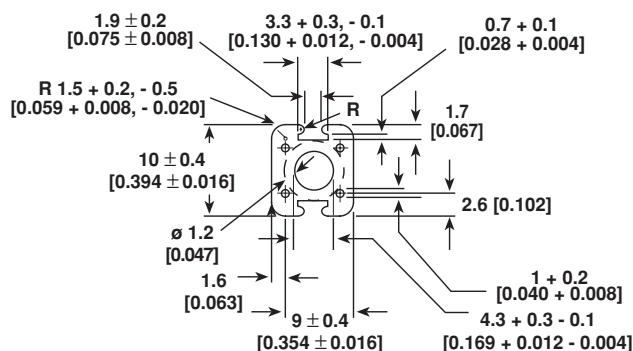
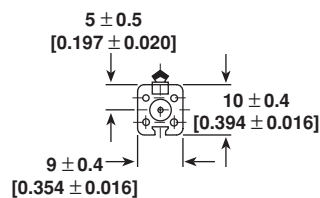
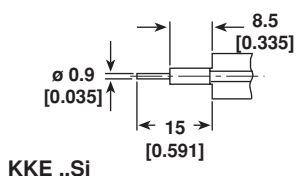
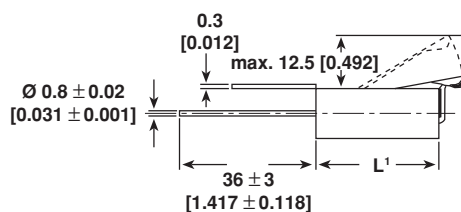

KKA...

*in this section confined solderability 4mm [0.157]



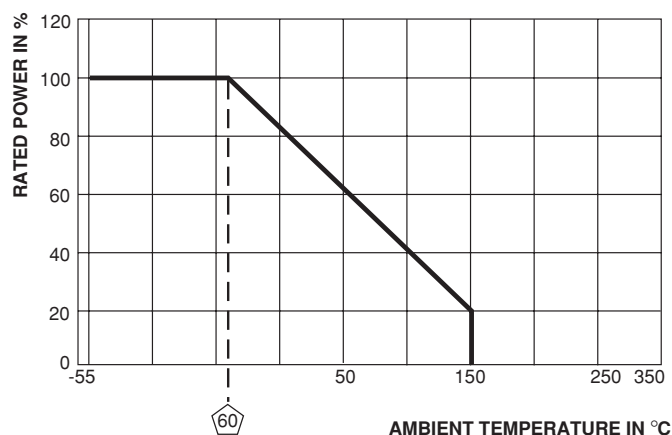
MODEL	DIMENSIONS in millimeters [inches]			
	a	b	L	WEIGHT (grams)
KKA 4	6 [0.236]	6 [0.236]	19.5 [0.768]	1.8
KKA 5	6 [0.236]	6 [0.236]	25 [0.984]	5.5
KKA 7	6 [0.236]	6 [0.236]	38 [1.496]	3.2
KKA 9	9 [0.354]	9 [0.354]	38 [1.496]	7
KKA 11	9 [0.354]	9 [0.354]	50 [1.969]	9
KKA 17	9 [0.354]	9 [0.354]	75 [2.953]	13
KKE 4	7 [0.276]	7.8 [0.307]	19.5 [0.768]	2
KKE 7	9 [0.354]	10.5 [0.413]	25 [0.984]	4
KKE 9	9 [0.354]	10.5 [0.413]	38 [1.496]	7.5
KKE 11	9 [0.354]	10.5 [0.413]	50 [1.969]	9.5
KKE 17	9 [0.354]	10.5 [0.413]	75 [2.953]	13.5

DIMENSIONS (CONT'D)

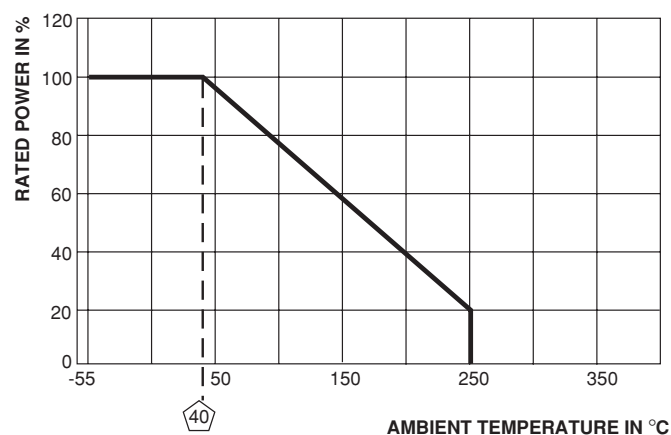


Profile Dimensions

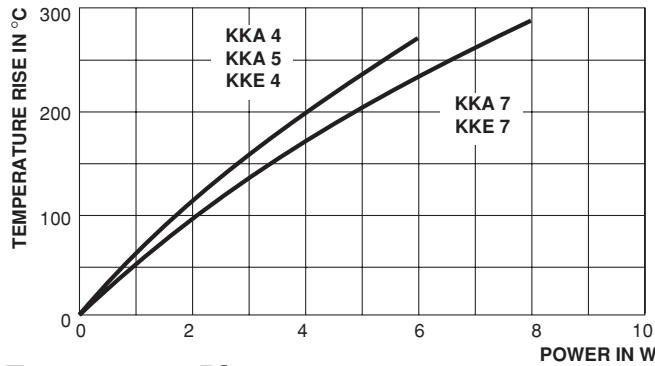
MODEL	DIMENSIONS in millimeters [inches]			
	a	b	L	WEIGHT (grams)
KKE 7 Si	9 [0.354]	10.5 [0.413]	25 [0.984]	5.5
KKE 9 Si	9 [0.354]	10.5 [0.413]	38 [1.496]	8
KKE 11 Si	9 [0.354]	10.5 [0.413]	50 [1.969]	9.8
KKE 17 Si	9 [0.354]	10.5 [0.413]	75 [2.953]	13.7



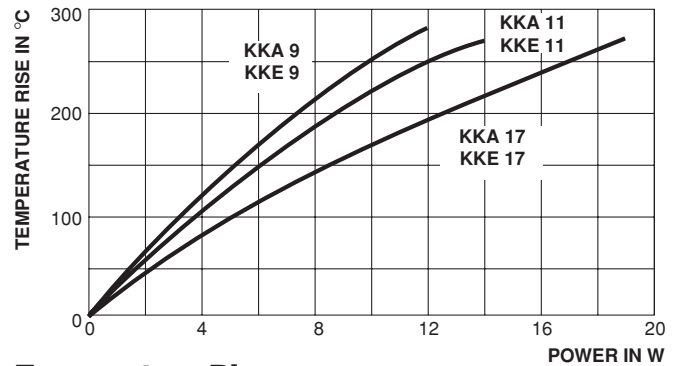
Derating KKA, KKE



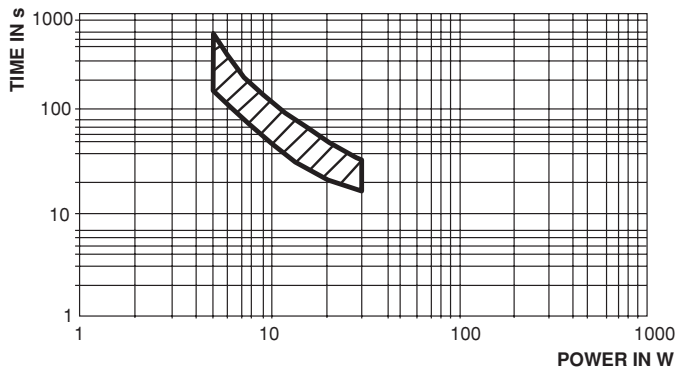
Derating KKE..Si



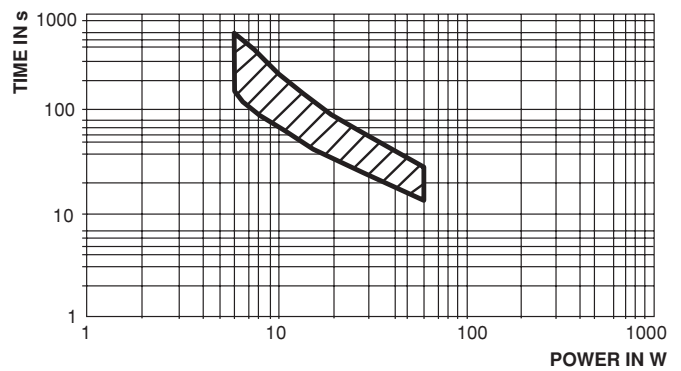
Temperature Rise



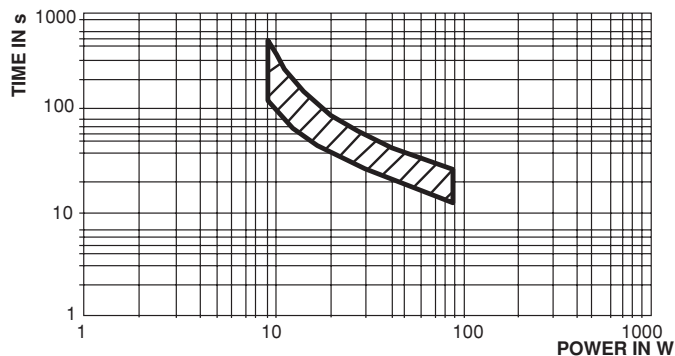
Temperature Rise



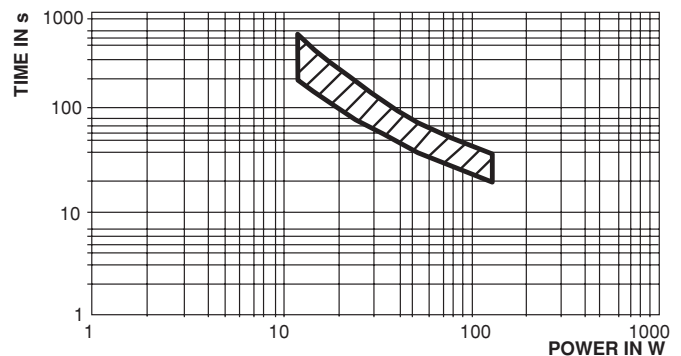
Fusing Characteristics KKE 7 Si



Fusing Characteristics KKE 9 Si



Fusing Characteristics KKE 11 Si



Fusing Characteristics KKE 17 Si

PERFORMANCE

TEST	TEST RESULTS
Load Life (P70, 70°C, 1000 hours)	$\leq \pm 3.0\% \Delta R$ average
Climatic Sequence	$\leq \pm 2.0\% \Delta R$
Damp Heat. Steady State (40°C, 93% r.h., 56 days)	$\leq \pm 2.0\% \Delta R$
Resistance to Soldering Heat (260°C, 10 seconds)	$\leq \pm 0.2\% \Delta R$ typical