

Bild 2-1. Begriffsbestimmungen für Baueinheiten nach DIN 40 150.

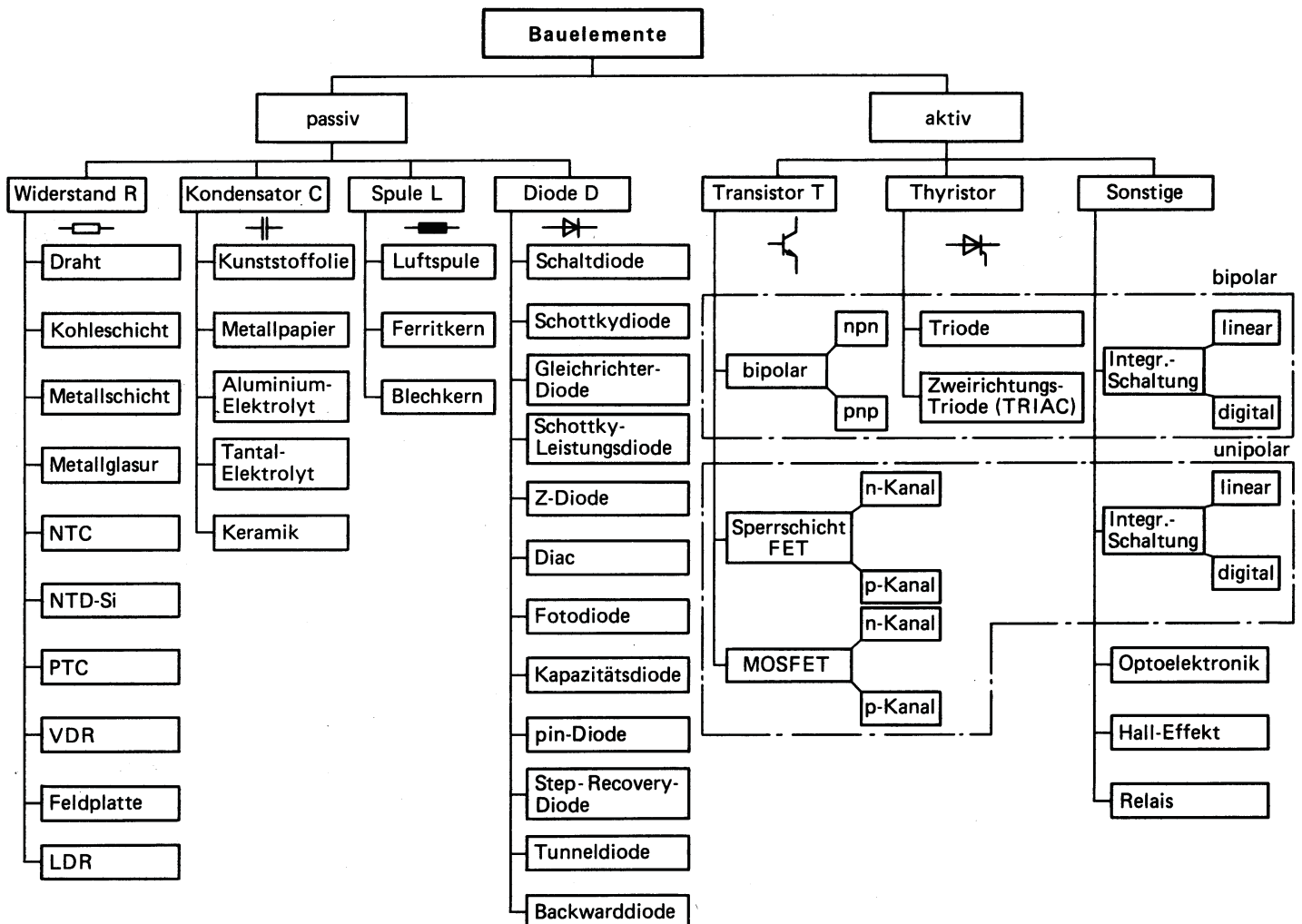
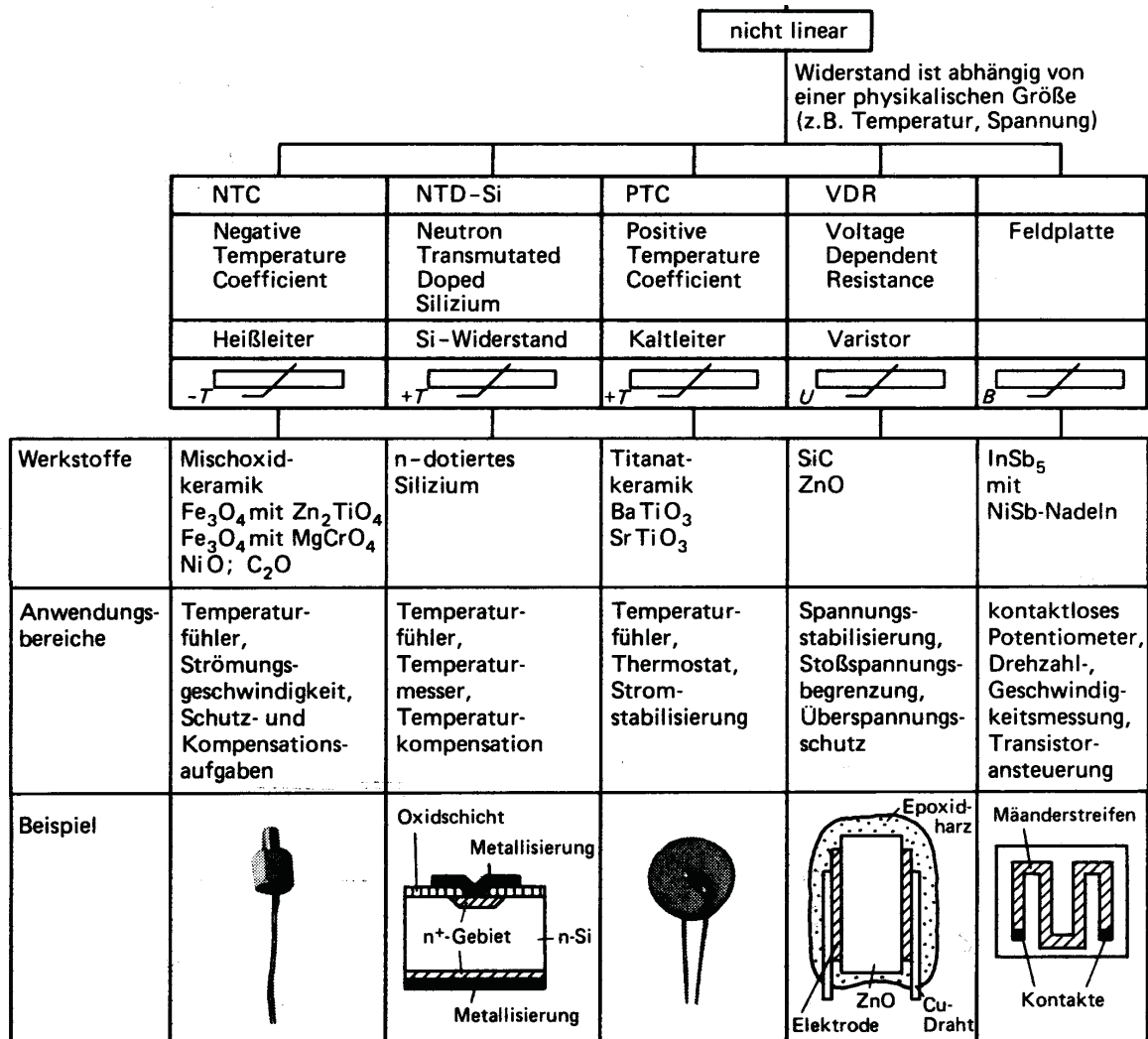
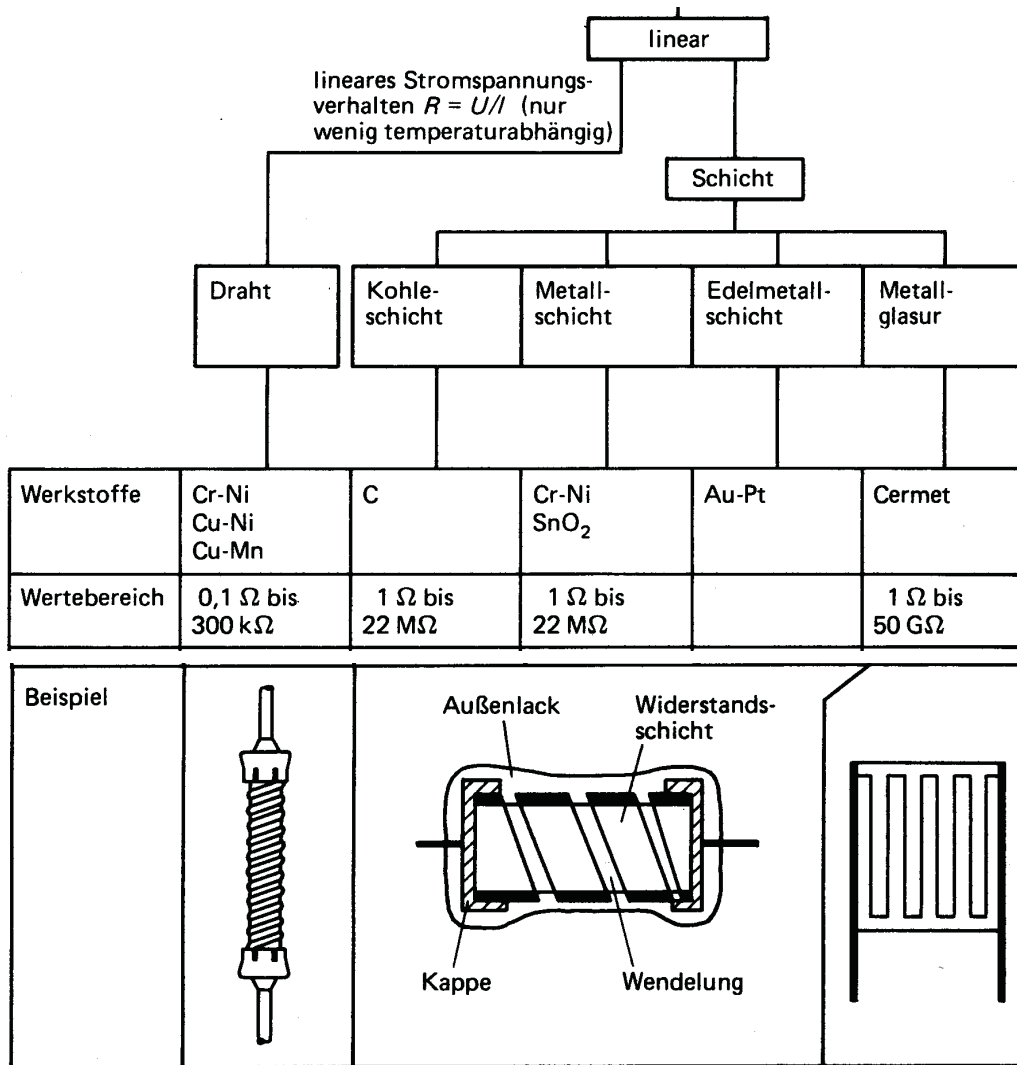
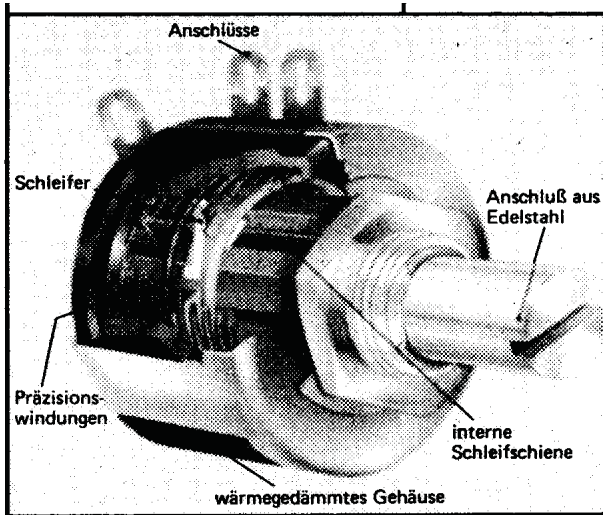
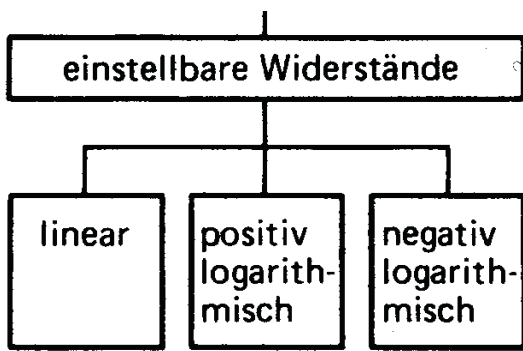


Bild 2-2. Einteilung der Bauelemente.






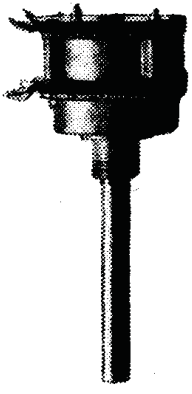


Werkstoffe	Draht	
	Kohleschicht DIN 41450	
	Cermet (Metalloxid- und Glaspulver in Keramikträger eingebrannt)	
Anwendungsbereiche	Spannungsteiler (Potentiometer, Trimmer)	Lautstärkeregler
	 Draht	
	 Cermet	

Tabelle 2-4. Internationaler Farbcode nach DIN JEC 62 und JEC 115-1-4.5.

Kennfarbe	Widerstandswert in Ω		Toleranz	Temperaturkoeffizient
	zählende Ziffern	Multiplikator		
silber	—	10^{-2}	$\pm 10\%$	—
gold	—	10^{-1}	$\pm 5\%$	—
schwarz	0	1	—	$\pm 200 \cdot 10^{-6}/K$
braun	1	10	$\pm 1\%$	$\pm 100 \cdot 10^{-6}/K$
rot	2	10^2	$\pm 2\%$	$\pm 50 \cdot 10^{-6}/K$
orange	3	10^3	—	$\pm 15 \cdot 10^{-6}/K$
gelb	4	10^4	—	$\pm 25 \cdot 10^{-6}/K$
grün	5	10^5	$\pm 0,5\%$	—
blau	6	10^6	$\pm 0,25\%$	$\pm 10 \cdot 10^{-6}/K$
violett	7	10^7	$\pm 0,1\%$	$\pm 5 \cdot 10^{-6}/K$
grau	8	—	—	$\pm 1 \cdot 10^{-6}/K$
weiß	9	—	—	—

E96 (1%)	1.00	1.02	1.05	1.07	1.10	1.13	1.15	1.18	1.21	1.24	1.27	1.30
	1.33	1.37	1.40	1.43	1.47	1.50	1.54	1.58	1.62	1.65	1.69	1.74
	1.78	1.82	1.87	1.91	1.96	2.00	2.05	2.10	2.15	2.21	2.26	2.32
	2.37	2.43	2.49	2.55	2.61	2.67	2.74	2.80	2.87	2.94	3.01	3.09
	3.16	3.24	3.32	3.40	3.48	3.57	3.65	3.74	3.83	3.92	4.02	4.12
	4.22	4.32	4.42	4.53	4.64	4.75	4.87	4.99	5.11	5.23	5.36	5.49
	5.62	5.76	5.90	6.04	6.19	6.34	6.49	6.65	6.81	6.98	7.15	7.32
	7.50	7.68	7.87	8.06	8.25	8.45	8.66	8.87	9.09	9.31	9.53	9.76
E48 (2%)	1.00	1.05	1.10	1.15	1.21	1.27	1.33	1.40	1.47	1.54	1.62	1.69
	1.78	1.87	1.96	2.05	2.15	2.26	2.37	2.49	2.61	2.74	2.87	3.01
	3.16	3.32	3.48	3.65	3.83	4.02	4.22	4.42	4.64	4.87	5.11	5.36
	5.62	5.90	6.19	6.49	6.81	7.15	7.50	7.87	8.25	8.66	9.09	9.53
	E24 (5%)	1.0	1.1	1.2	1.3	1.5	1.6	1.8	2.0	2.2	2.4	2.7
3.3		3.6	3.9	4.3	4.7	5.1	5.6	6.2	6.8	7.5	8.2	9.1
E12 (10%)	1.0	1.2	1.5	1.8	2.2	2.7	3.3	3.9	4.7	5.6	6.8	8.2

E. Riedle

Physik^{LMU}

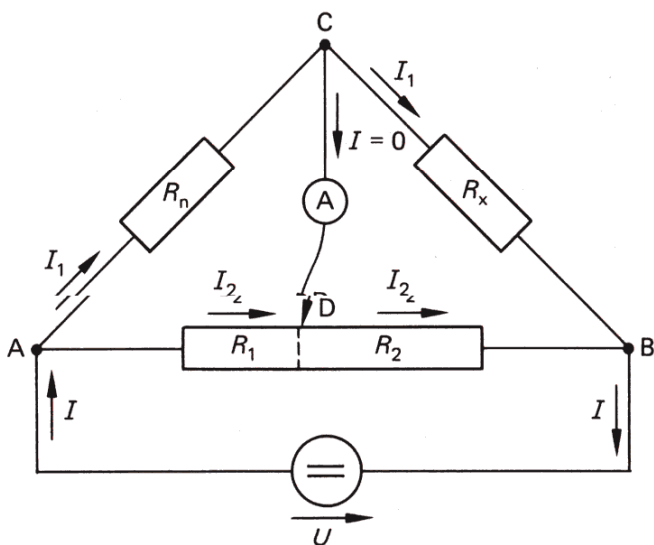


Bild 1-16. Wheatstonesche Brücke.

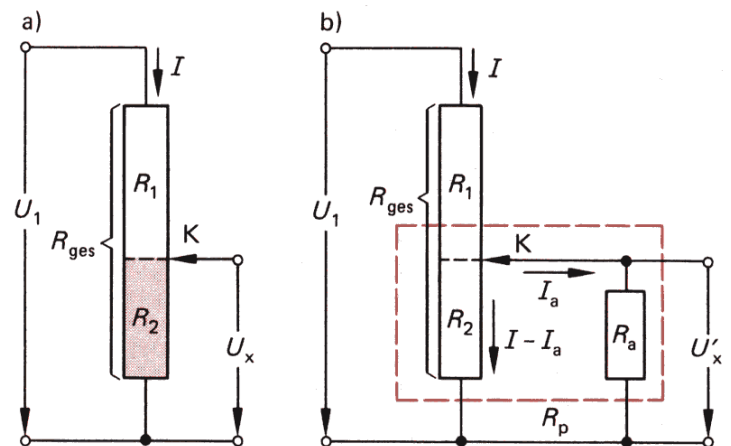


Bild 1-17. Potentiometerschaltung.

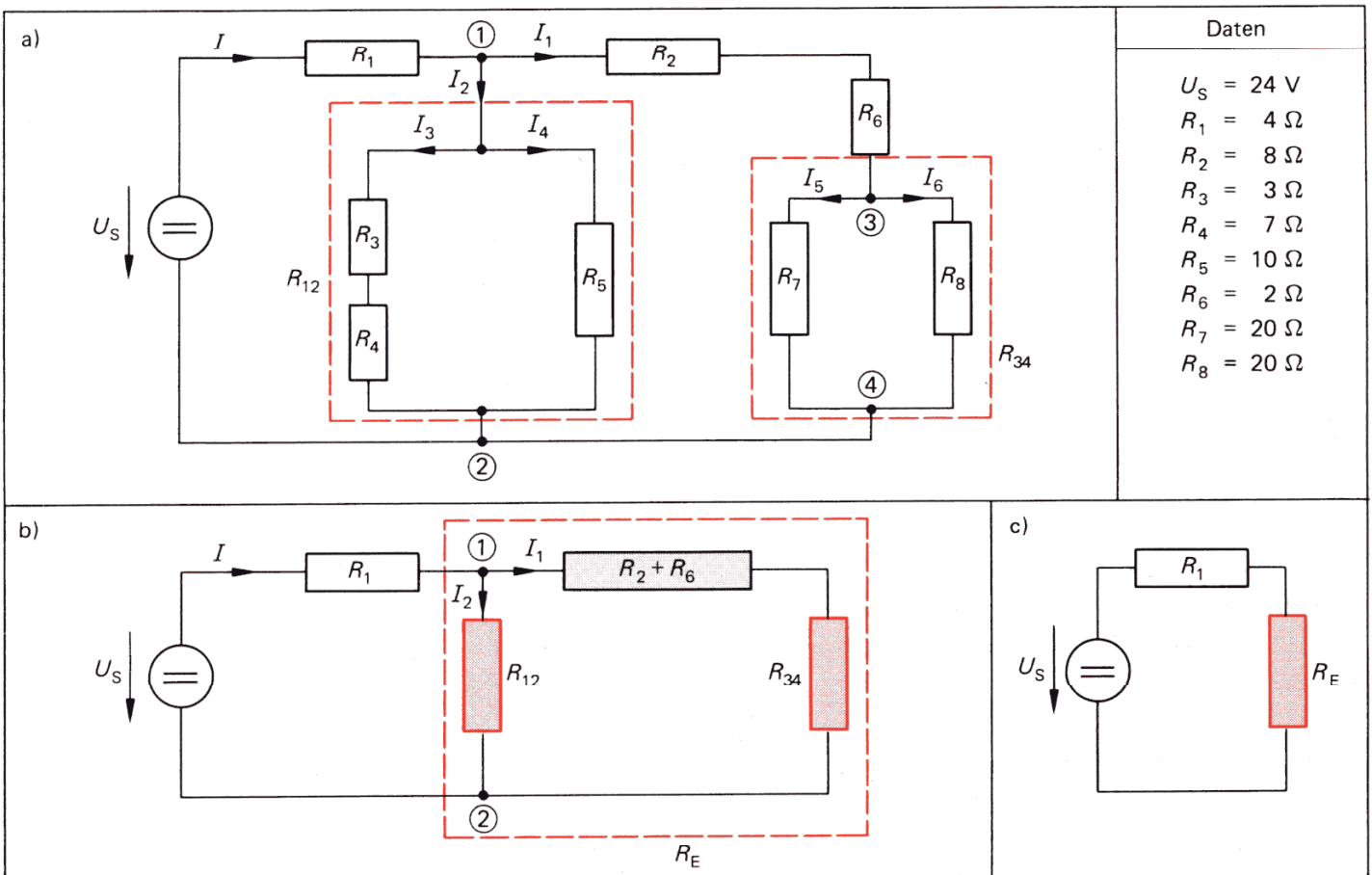
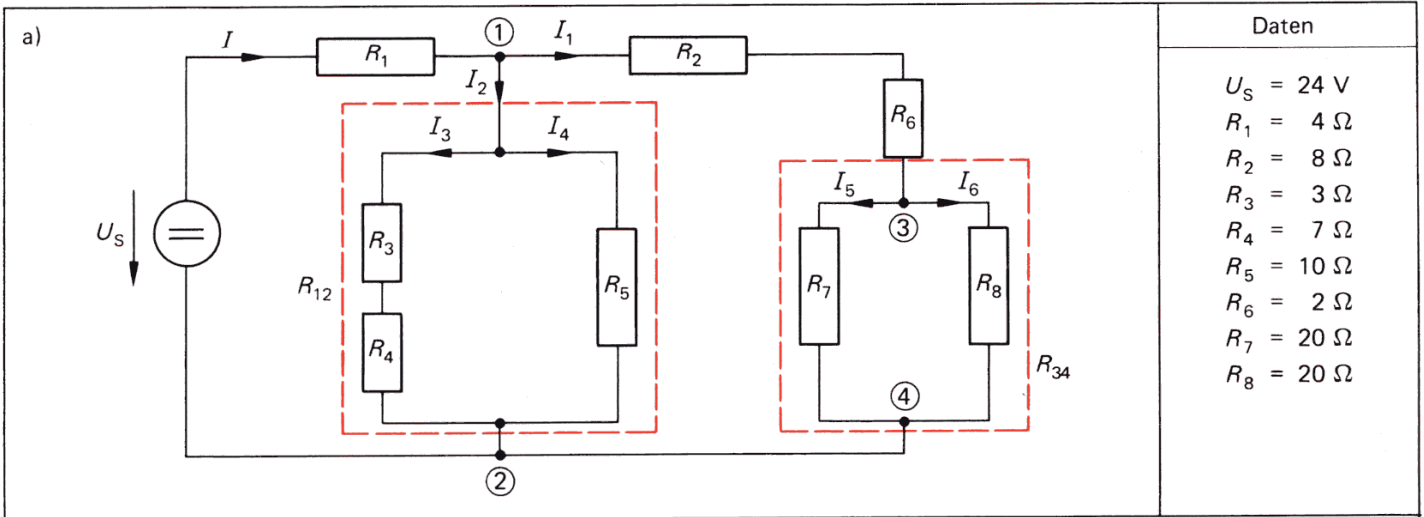


Bild 1-13. Schaltung zu Beispiel 1.3-3.

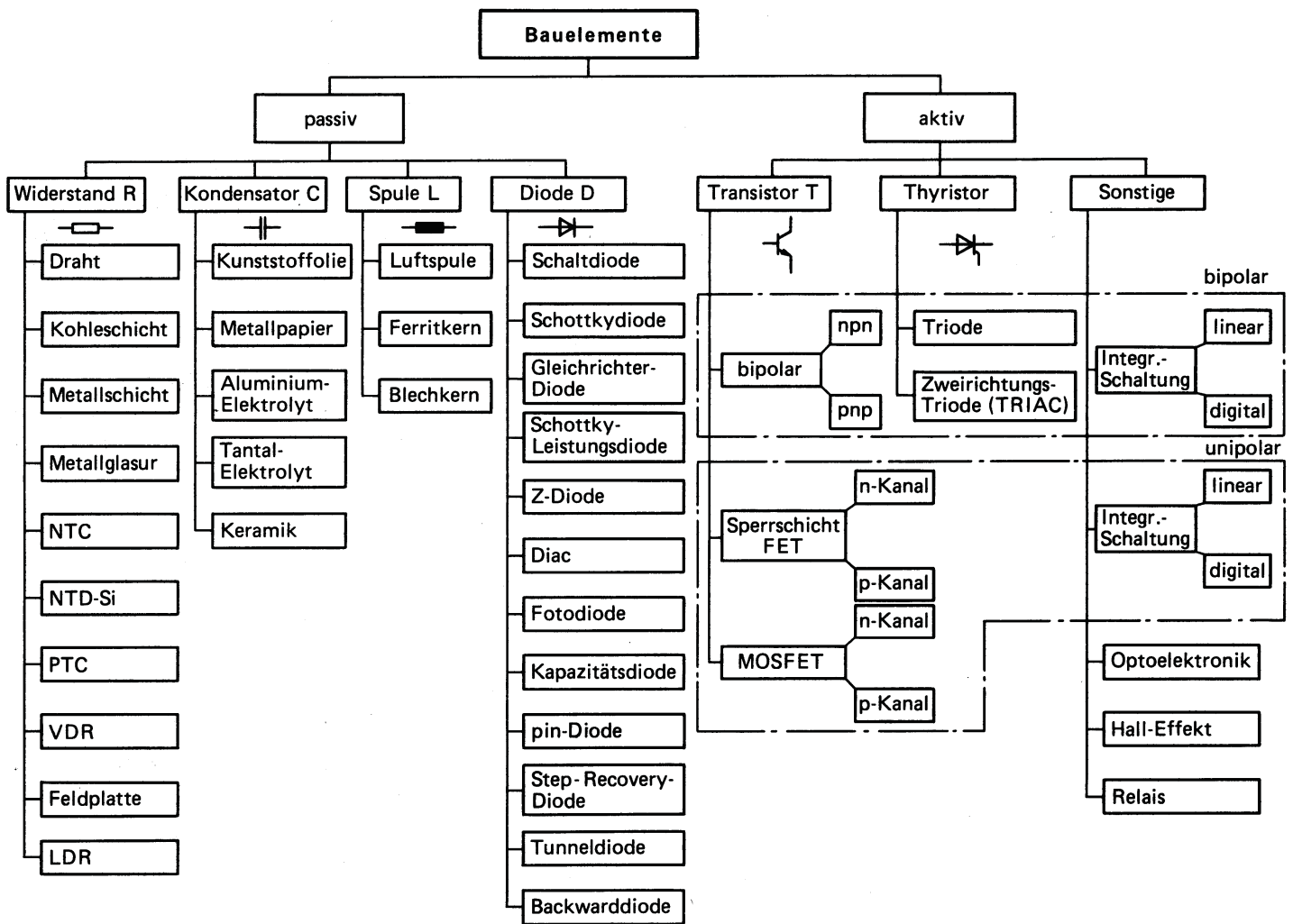
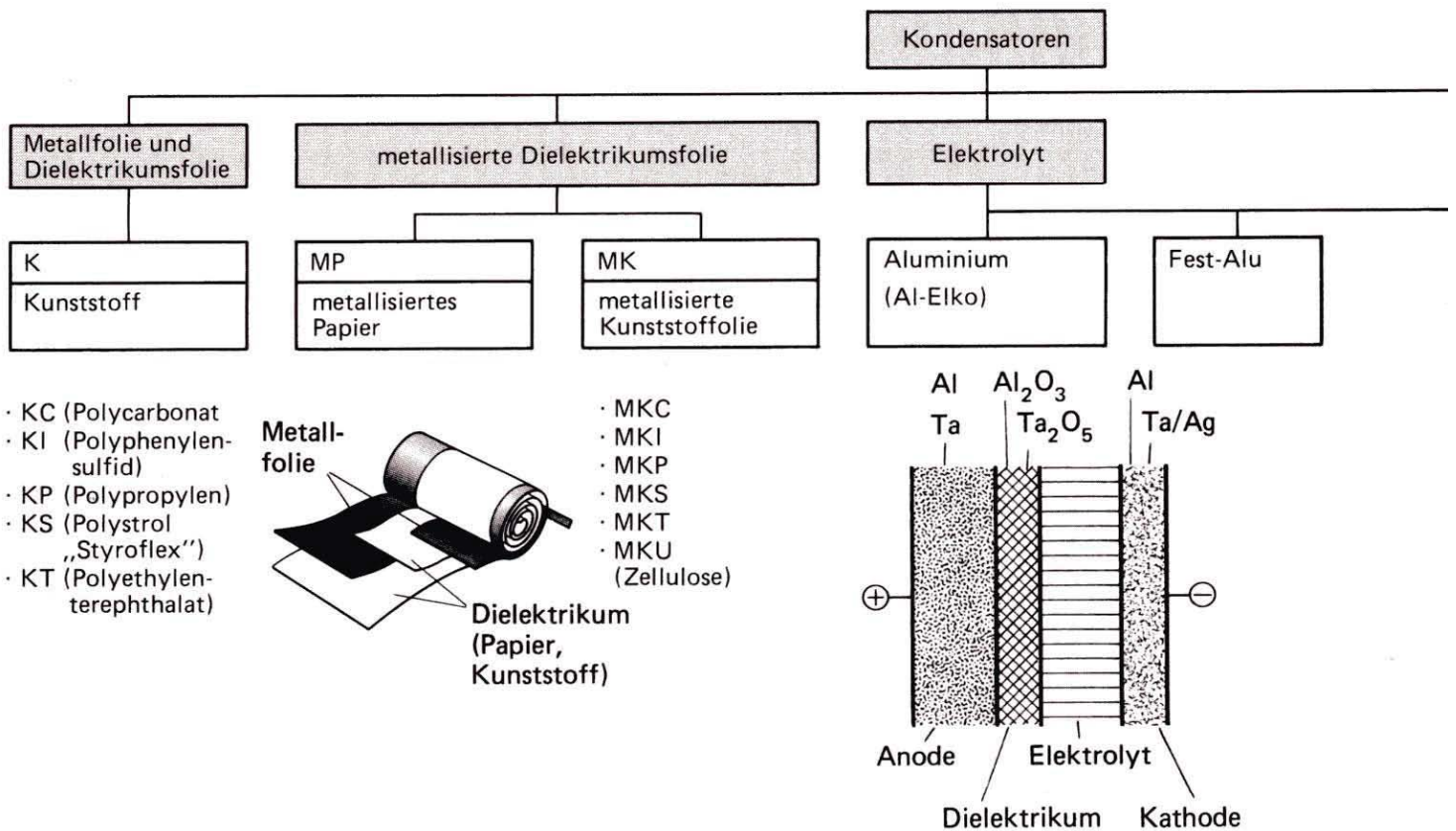
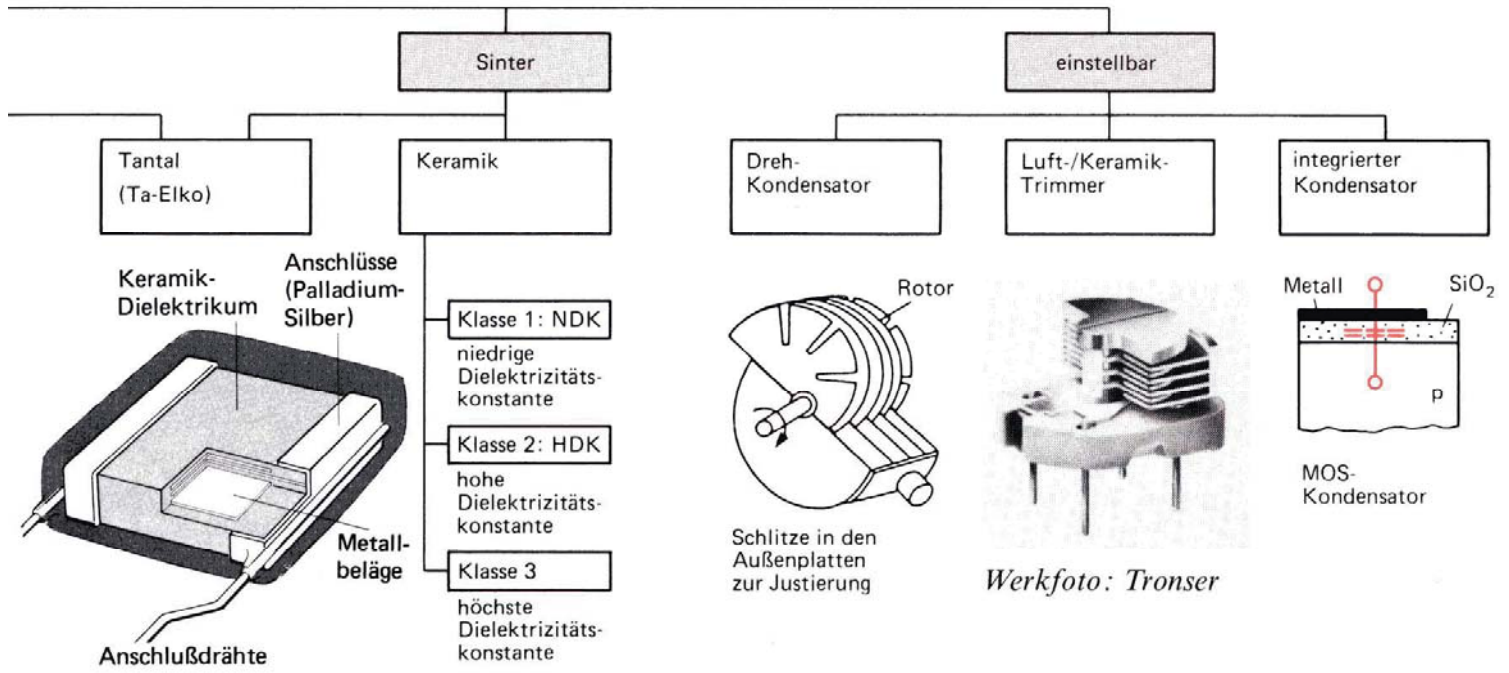
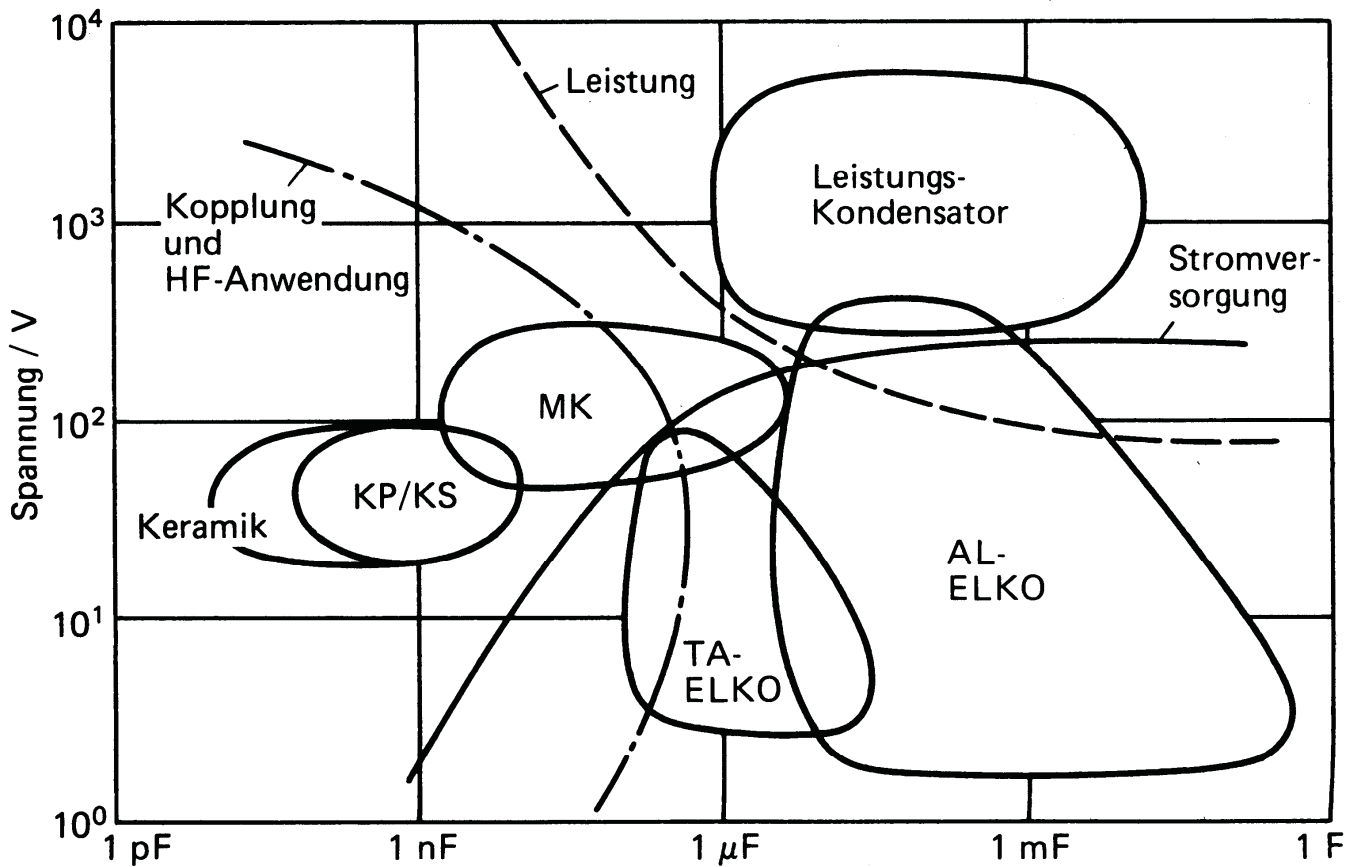


Bild 2-2. Einteilung der Bauelemente.





Spannungs-Kapazitäts-Bereiche



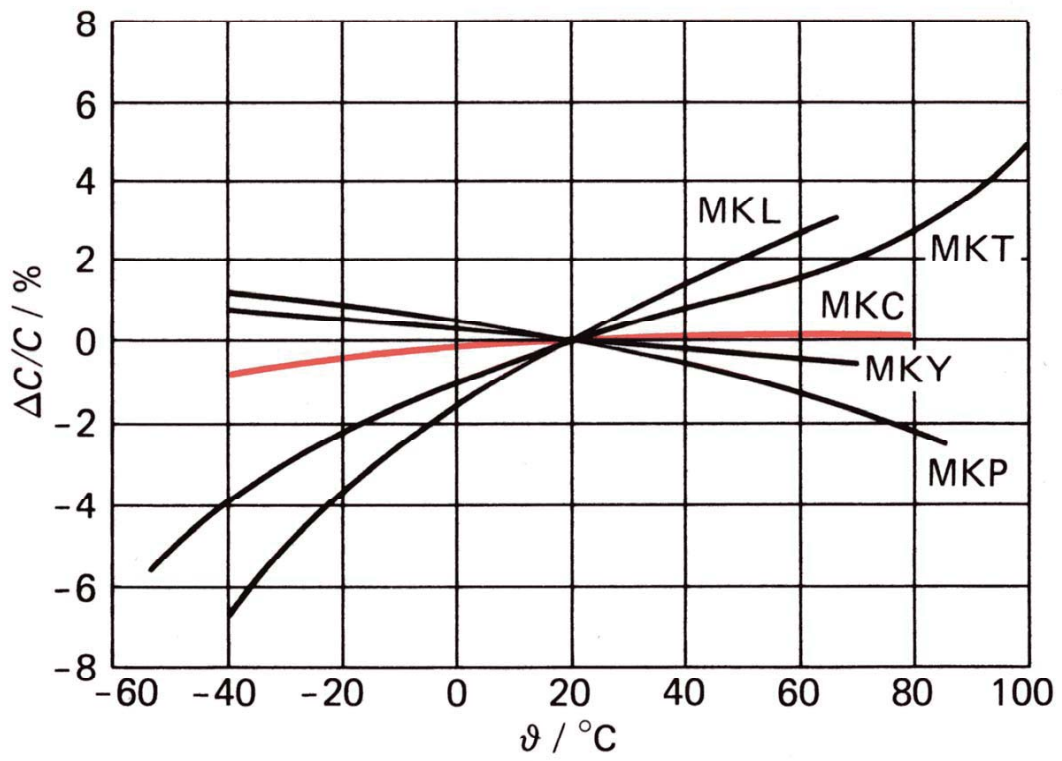


Bild 2-31. Relative Kapazitätsänderung in Abhängigkeit von der Temperatur.