



503177  
535060  
535605  
535613

Typ Type		Durchlaßbandbreite Pass band width		Dämpfungsbandbreite Attenuation band width		Nebenwellendämpfung Spurious wave attenuation			Einfügdämpfung Insertion loss		Eingangs-Ausgangs-Impedanz In/Output impedance	
		6 dB (kHz) min.	(kHz) min.	(kHz) max.	(kHz) max.	(dB) min.	CFU	CFV	CFW	(dB) max.	(k $\Omega$ )	(k $\Omega$ )
CFU455B2	CFW455B	± 15		± 30		27		35		4		1,5
CFU455C2	CFW455C	± 12,5		± 24		27		35		4		1,5
CFU455D2	CFW455D	± 10		± 20		27		35		4		1,5
CFU455E2	CFW455E	± 7,5		± 15		27		35		6		1,5
CFU455F2	CFW455F	± 6		± 12,5		27		35		6		2
CFU455G2	CFW455G	± 4,5		± 10		25		35		6		2
CFU455H2	CFW455H	± 3		± 9		25		35		6		2
CFU455I2	CFW455I	± 2		± 7,5		25		35		6		2
CFU455HT	CFW455HT	± 3		± 9		35		60		6		2
CFU455IT	CFW455IT	± 2		± 7,5		35		60		6		2
	CFW455E	± 8		± 16			50			6		1,5
	CFW455E10	± 7		± 12,5			50			6		1,5

Die Sperrdämpfung gilt bei 455 ± 100 kHz  
Stop band attenuation is specified at 455 ± 100 kHz

\* Die Dämpfungsbandbreite gilt für eine Dämpfung von 40 dB (CFU), 50 dB (CFW), 60 dB (CFV)  
Attenuation band width is specified by the attenuation of 40 dB (CFU), 50 dB (CFW), 60 dB (CFV)

Typ Type	Dämpfung bei ... Attenuation at ... 455 ± 100 kHz (dB) min.	Nebenwellendämpfung bei ... Spurious wave attenuation at ... 0,1 ... 1 MHz (dB) min.
CFS 455.	70 (J: 60)	50
CFK 455.	80	50
CFX 455.	70	50 (B - E: 40)
CFM 455.	50 (E - H: 45)	30
CFL 455.	60	40
CFG 455.	50	25
CFJ 455K3	80 (0,1 - 0,8 MHz)	60 (0,6 - 0,7 MHz)
CFJ 455K4	60 (0,1 - 1 MHz)	40 (0,6 - 0,7 MHz)
CFJ 455K5	-	60 (0,1 - 1 MHz, 40 (0,6 - 0,7 MHz)
CFJ 455K6	50	-
CFJ 455K7*	50 (453,5 ± 100 kHz)	-
CFJ 455K8	60	-

Mittenfrequenz / Center frequency 453,5 kHz

Bandbreitenklasse Band width rank	Durchlaßbandbreite Pass band width		* Dämpfungsbandbreite Attenuation band width	** Einfügungsdämpfung Insertion loss					Eingangs-Ausgangs-Impedanz In/Output impedance					
	3 dB (kHz) min.	6 dB (kHz) min.		(kHz) max.	(dB) max.	CFS	CFM	CFK/CFL/CFX/CFG	CFJ	CFS	CFM	CFK	CFL/CFX/CFG	CFJ
.....A	± 13	± 17,5	± 30		4	3	-	-	1,5	1	-	-	-	-
.....B	± 10	± 15	± 25		4	3	4	-	1,5	1	1	1	-	-
.....C	± 9	± 13	± 23		4	3	4	-	1,5	1	1	1	-	-
.....D	± 7	± 10	± 20		4	3	4	-	1,5	1,5	1,5	1,5	-	-
.....E	± 5,5	± 8	± 16 (CFS: ± 15)		6	5	6	-	1,5	1,5	1,5	1,5	-	-
.....E10	± 5	± 7,5	± 12,5		-	-	6	-	-	-	1,5	1,5	-	-
.....F	± 4,2	± 6	± 12		6	6	6	-	2	2	2	1,5	-	-
.....G	-	± 4	± 10		6	6	6	-	2	2	2	1,5	-	-
.....H	-	± 3	± 7,5		7	6	7 (CFG: 6)	-	2	2	2	1,5	-	-
.....I	-	± 2	± 5		8	7	8	-	2	2	2	2	-	-
.....J	-	± 1,5	± 4,5		8	-	8	-	2	-	2	2	-	-
CFJ455K3	-	2,7	4,7		-	-	-	6	-	-	-	-	-	2
CFJ455K4	-	2,7	5,0		-	-	-	6	-	-	-	-	-	2
CFJ455K5	-	2,4	4,5		-	-	-	6	-	-	-	-	-	2
CFJ455K6	-	± 1,0	± 2,0		-	-	-	6	-	-	-	-	-	2
CFJ455K7	-	± 1,0	± 2,0		-	-	-	6	-	-	-	-	-	2
CFJ455K8	-	1,0	3,0		-	-	-	8	-	-	-	-	-	2

\* Die Dämpfungsbandbreite gilt für eine Dämpfung von 80 dB (CFS),  
70 dB (CFK, CFX, CFL), 60 dB (CFM, CFG, CFJ)  
Attenuation band width is specified by the attenuation of 80 dB (CFS),  
70 dB (CFK, CFX, CFL), 60 dB (CFM, CFG, CFJ)

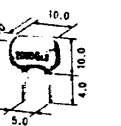
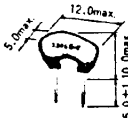
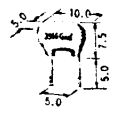
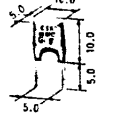
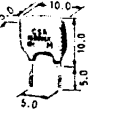
\*\* Die Welligkeit beträgt 3 dB max. (innerhalb der Durchlaßbandbreite)  
Ripple is 3 dB max. (within pass band width)

CSA Serie 1,26 MHz ~ 32 MHz

Keramik-Resonatoren

CSA series 1,26 MHz ~ 32 MHz

Ceramic resonators


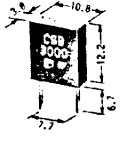
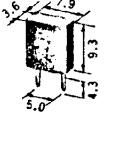
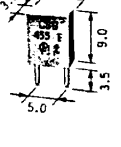
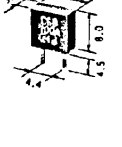

CSA...MK	CSA...MG	CSA...MG	CSA...MT	CSA...MX	4007
					
1,26 ~ 1,99 MHz	2,00 ~ 2,44 MHz	2,45 ~ 6,00 MHz	6,01 ~ 32 MHz	12 ~ 32 MHz	

CSB Serie 190 kHz ~ 1250 kHz

Keramik-Resonatoren

CSB series 190 kHz ~ 1250 kHz

Ceramic resonators

CSB...D	CSB...D	CSB...P	CSB...E/P	CSB...A	CSB...J 4007
					
190 ~ 249 kHz	250 ~ 374 kHz	375 ~ 429 kHz	430 ~ 649 kHz	650 ~ 749 kHz	700 ~ 1250 kHz

Weitere Keramik-Resonatoren-Typen auf Anfrage  
Further ceramic resonators on request

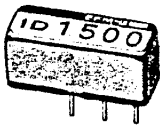
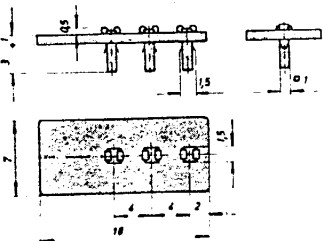
Piezoelektrische Stimmgabelfilter  
(passives Filter)

Piezoelectric tuning fork filters  
(passive filter)

Fassung für EFM-GA/GC  
Socket for EFM-GA/GC

EFM-GA/GC

4220





Typ CSA (für MOS) Type CSA (for MOS)	Frequenzbereich Frequency range (MHz)	Typ CSA (für TTL) Type CSA (for TTL)	Frequenzbereich Frequency range (MHz)
CSA...MK	1,26 ~ 1,99	CSA...MK011	1,26 ~ 1,99
CSA...MG	2,00 ~ 6,00	CSA...MG011	2,00 ~ 6,00
CSA...MT	6,01 ~ 13,0	CSA...MT 011	6,01 ~ 11,9
CSA...MX040	13,1 ~ 32,0	CSA...MX011	12 ~ 30
... = Frequenz / frequency			

Typ Type	Frequenz-Genauigkeit bei 25°C Frequency accuracy at 25°C (%)	Stabilität (- 20 ... + 80°C) Stability (- 20 ... + 80°C) (%)	Alterung (10 Jahre) Aging (10 years) (%)
CSA...MK	± 0,5	± 0,3	± 0,3
CSA...MG	± 0,5	± 0,3	± 0,3
CSA...MT	± 0,5	± 0,5	± 0,5
CSA...MX040	± 0,5	± 0,3	± 0,3
... = Frequenz / frequency			

Typ CSB Type CSB	Frequenzbereich Frequency range (kHz)	C <sub>1</sub> (pF)	C <sub>2</sub> (pF)
CSB...D	190 ~ 249	330	470
CSB...D	250 ~ 374	220	470
CSB...P	375 ~ 429	120	470
CSB...E	430 ~ 509	100	100
CSB...P	510 ~ 649	100	100
CSB...A	650 ~ 749	100	100
CSB...J	700 ~ 1250	100	100
... = Frequenz / frequency			

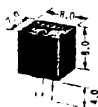
Typ Type	Frequenzbereich Frequency range (kHz)	Frequenz-Genauigkeit bei 25°C Frequency accuracy at 25°C	Stabilität (- 20 ... + 80°C) Stability (- 20 ... + 80°C)	Alterung (10 Jahre) Aging (10 years)
CSB...D	190 ~ 374	± 1 kHz	± 0,3 %	± 0,5 %
CSB...P, E, A, J	375 ~ 800	± 2 kHz	± 0,3 %	± 0,5 %
CSB...J	801 ~ 999	± 4 kHz	± 0,3 %	± 0,5 %
CSB...J	1000 ~ 1250	± 0,5 %	± 0,3 %	± 0,5 %
... = Frequenz / frequency				

Typ Type	Frequenzbereich Frequency range	Anwendung Application
EFM - GA	288,5 ... 3000 Hz	Empfänger / receiver unit
EFM - GC	288,5 ... 3000 Hz	Sender / transmitter unit

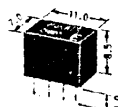
**Keramik-Filter für AM 455 kHz**

**Ceramic filters for AM 455 kHz**

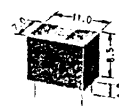
CFU455..



CFW455..



CFV455..



**4006**

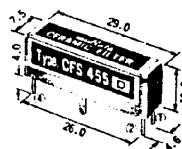
455 kHz Filter für die digitale Kommunikationstechnik  
auf Anfrage

455 kHz filter for digital communications  
on request

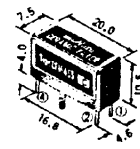
**Keramik-Filter für AM 455 kHz**

**Ceramic filters for AM 455 kHz**

CFS455.

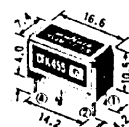


CFM455.

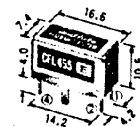


**4006**

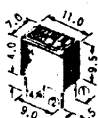
CFK455.



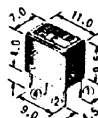
CFL455.



CFX455.



CFG455.



CFJ455..

