

FM Ceramic Filters

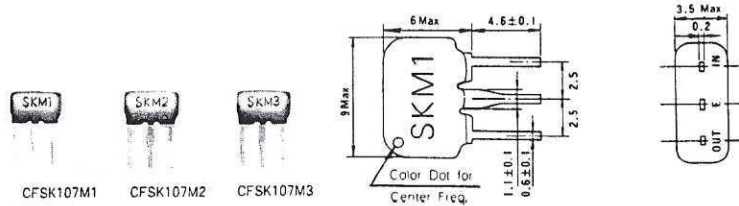
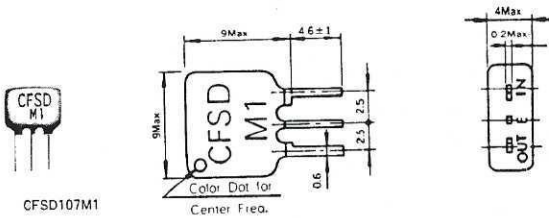
CFSD: Excellent flat group delay in the pass band.

CFSK: Low profile for compact designs.

Frequency Range: 10.7MHz

Temperature Coefficient: $0 \pm 50 \text{ ppm}/^\circ\text{C}$

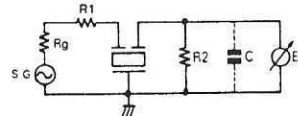
Temperature Range: -10 to $+80^\circ\text{C}$



Quality Features:

- Ceramic filters offer ultra-miniature size for high density and are unaffected by magnetic interference.
- Dual resonating elements make up a 2-element wafer and are capacitance coupled for lower distortion.
- Ideal for electronic tuners where superior resistance to temperature fluctuations and high performance are required.
- Outstanding selectivity characteristics are achieved without alignment. Because ceramic filters are not subject to peaking during alignment, they are well suited for automatic assembly.
- The low temperature coefficient (which is practically linear) provides high reliability to accommodate a wide range of applications.
- High selectivity and good spurious response suppression.
- Progressive three-step kiln process assures uniformity for precise frequency control and environmental protection.

Test Circuit



Test Condition

$$R_1 + R_g = R_2 = 330 \Omega$$

$$C \geq 15 \text{ pF} \quad (\text{include E.V. Cap.})$$

- The final outer coating of resin provides an additional moisture barrier for long, trouble-free service in hostile environments.
- Unlike other manufacturers who use the ceramic package to pressure the components together, (which can cause oxidation to form between the element and terminal), TOKO solders the resonating element and the silver terminal pin leads together, using the TOKO proprietary Micro Soldering technique. Characteristics, such as resonant resistance and the overall performance, remain constant throughout the life of the device.
- The CFSK features wedge shaped self-supporting terminals to assure a good grasp to the PCB before soldering.
- Notched standoffs on leads assure straight mounting and prevent component damage during assembly to the PCB.

STANDARD DEVICES SELECTION GUIDE

The Part Numbers shown in the table below are standard devices, which are readily available. TOKO will design and manufacture modified and custom devices with specific characteristics to meet your requirements. If you do not find the device for your application in this catalog, please see Modified and Custom Request Form located in the rear of this catalog.

TYPE CFSK

TOKO Part Number	Center Frequency ¹ (MHz)	Bandwidth		Insertion Loss (dB) max.	Spurious Response (dB) min.	I/O Impedance
		-3dB (kHz)	-20dB			
SK107M1-AE-10	10.7	280 ± 50	650	6	30	330
SK107M2-AE-00		230 ± 50	600	6	35	330
SK107M3-AE-20		180 ± 40	520	7	40	330

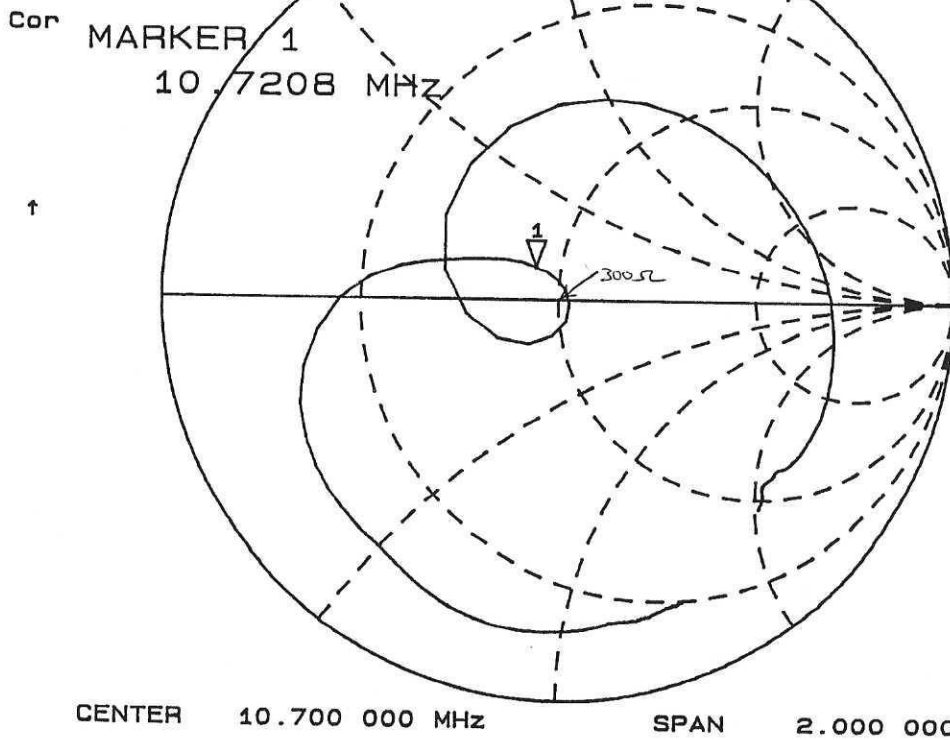
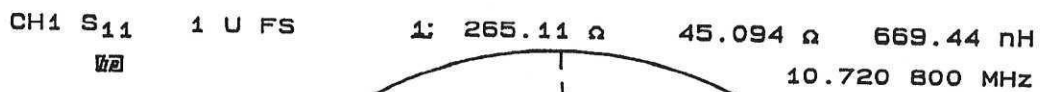
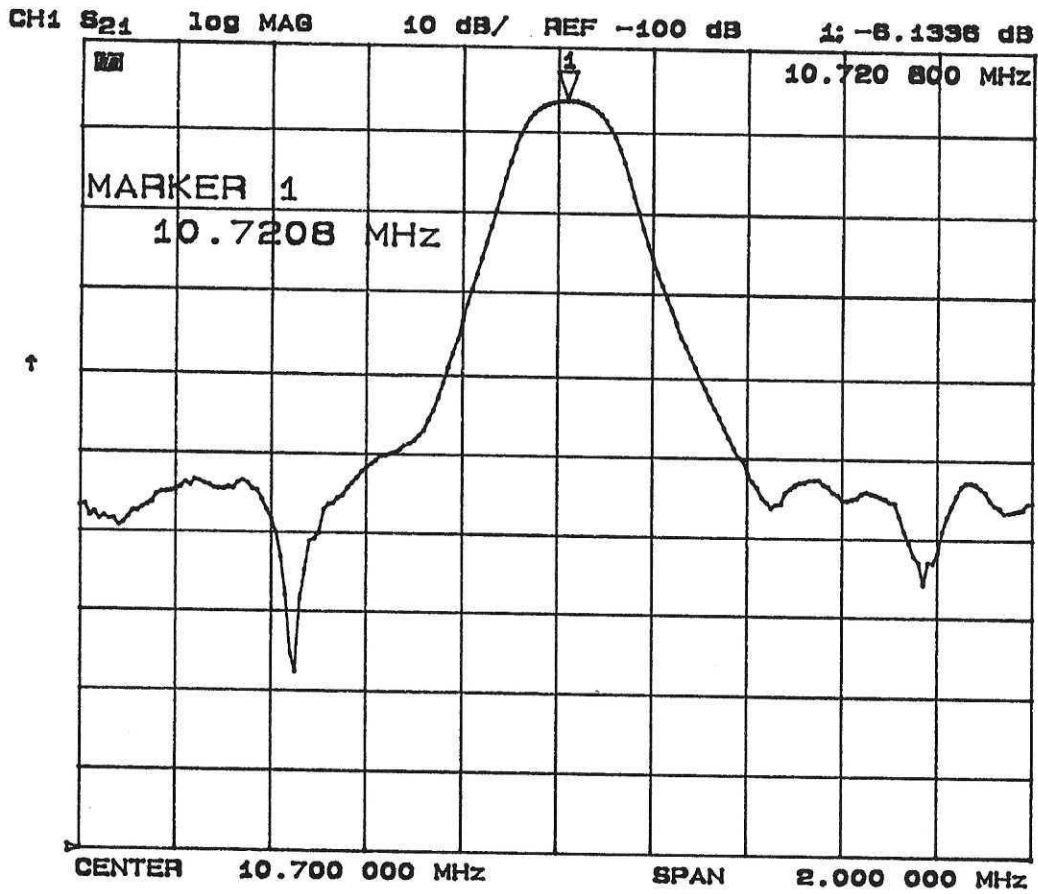
TYPE CFSD

SD107M1-AE-10G	10.7	280 ± 50	650	6	30	330
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CENTER FREQUENCY & COLOR CODE

Rank	Center Frequency	Color Code
A	10.70MHz ± 30kHz	None
B	10.67MHz ± 30kHz	Blue
C	10.73MHz ± 30kHz	Orange
D	10.64MHz ± 30kHz	Black
E	10.76MHz ± 30kHz	White

¹We suggest sampling all five ranks so you can adjust the circuit accordingly. Production shipments are segregated and marked by rank so you can plan your production accordingly.



NOTE:
 $Z_0 = 300 \Omega$