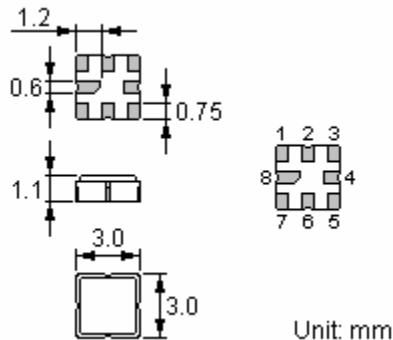


The LGE **F4109** is a low-loss, compact, and economical surface-acoustic-wave (**SAW**) RF filter in a surface-mount ceramic **QCC8D** case with center frequency **433.920** MHz.

#### 1. Package Dimension (QCC8D)



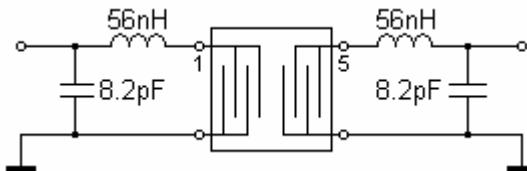
Pin	Configuration
1	Input
5	Output
2, 3, 6, 7	Ground
4, 8	Case Ground

#### 2. Marking

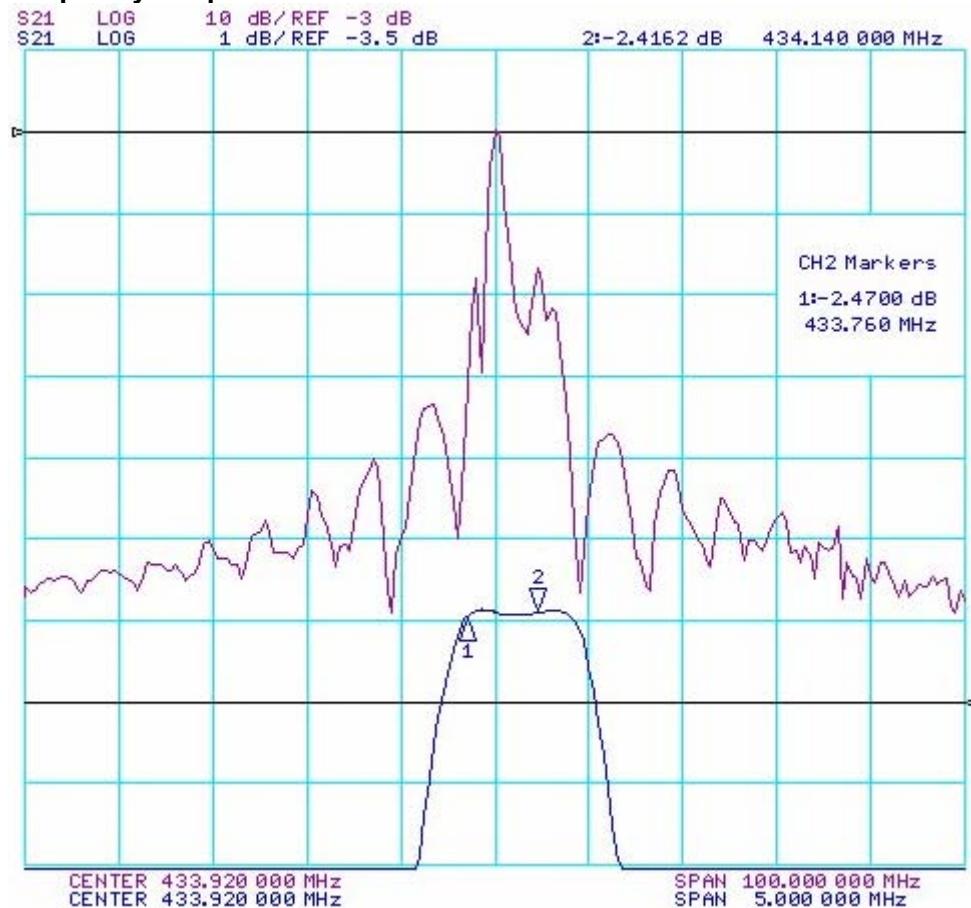
**LGE F4109**

Laser Marking

#### 3. Matching Circuit



#### 4. Typical Frequency Response





**LGE F4109**

SAW Filter

## 5. Performance

### 5-1. Maximum Ratings

Rating	Value	Unit
Input Power Level $P$	10	dBm
DC Voltage $V_{DC}$	12	V
Operable Temperature Range $T_A$	-10 to +65	°C
Storage Temperature Range $T_{stg}$	-40 to +85	°C

### 5-2. Electronic Characteristics

Characteristic	Minimum	Typical	Maximum	Unit
Center Frequency $f_C$	--	433.920	--	MHz
Insertion Loss $IL$ 433.760 .... 434.140 MHz	--	3.0	4.5	dB
Relative Attenuation (relative to $IL$ ) $f_C$ - 21.4 MHz $f_C$ - 10.7 MHz Ultimate	$\alpha_{rel}$ 38 35 48	48 45 60	-- -- --	dB dB dB
Amplitude Ripple (p-p) 433.760 .... 434.140 MHz	$\Delta\alpha$ --	--	1.0	dB