

FEATURES

- Cutoff frequency of resistor tuneable filters can be set with BCD logic.
- Single inline hybrid.
- Small size, low cost

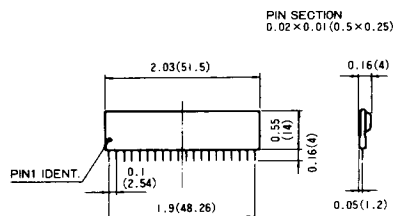
GENERAL DESCRIPTION

FLJ-ACR series are logic controlled resistor networks. They are designed to be used with resistor tuneable filters such as FLJ-UR series.

Four separate resistor networks are included in one package. One network consists of four resistors such as R, R/2, R/4 and R/8. The value of R in FLJ-ACR1 is 1.59M Ω while that of FLJ-ACR2 is 150k Ω .

A combination of an FLJ-ACR and an FLJ-UR makes it possible to make a filter whose cutoff frequency or center frequency is set with BCD logic. It is also possible to use this resistor network in the negative feedback loop of an amplifier circuit and control the gain with BCD logic.

MECHANICAL DIMENSIONS (Fig. 2) INCHES (mm)

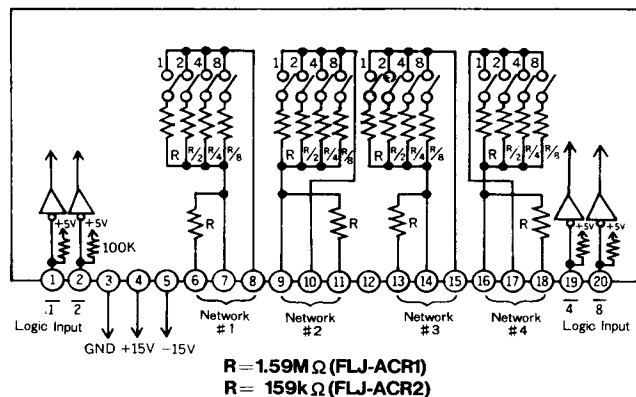


FLJ-UR Series List

Model No.	f _c Range	No. of Pole	Type
FLJ-UR4LA1	40Hz ~ 1.6KHz	4	LP, Butt.
FLJ-UR4LB1		4	LP, Cheb.
FLJ-UR4HA1		4	HP, Butt.
FLJ-UR4HB1		4	HP, Cheb.
FLJ-UR2LH1		2	LP/HP, Butt.
FLJ-UR1BA1		1 pair	BP, Butt.
FLJ-UR2BA1		2 pair	BP, Butt.
FLJ-UR2EA1		2 pair	BE, Butt.
FLJ-UR4LA2	400Hz ~ 20KHz	4	LP, Butt.
FLJ-UR4LB2		4	LP, Cheb.
FLJ-UR4HA2		4	HP, Butt.
FLJ-UR4HB2		4	HP, Cheb.
FLJ-UR2LH2		2	LP/HP, Butt.
FLJ-UR1BA2		1 pair	BP, Butt.
FLJ-UR2BA2		2 pair	BP, Butt.
FLJ-UR2EA2		2 pair	BE, Butt.

LP: Lowpass
HP: Highpass
BP: Bandpass

BE: Band elimination
Butt.: Butterworth
Cheb.: Chebychev



SPECIFICATIONS

Typical at 25°C, ±15VDC power supplies unless otherwise specified.

ABSOLUTE RATINGS

Power Supply Voltage (±Vs) ±18V
 Input Signal Voltage ±Vs
 Control Logic Voltage +5.5Vmax., -0.5V min.

FREQUENCY SET MODE

BCD 1 Digit 0 to 15
 BCD 1 Digit +1 1 to 16

Table 1. Frequency Set Range (with FLJ-UR) Unit: Hz

1a. FLJ-ACR1 or ACR2 Single Use

FLJ-UR Suffix		-1 (Low Range)		-2 (High Range)	
Frequency Set Mode		BCD	BCD+1	BCD	BCD+1
FLJ-ACR1	From	0*	10	0*	100
	To	150	160	1.5k	1.6k
	Resolution	10	10	100	100
FLJ-ACR2	From	0*	100	0*	1k
	To	1.5k	1.6k	15k	16k
	Resolution	100	100	1k	1k

1b. FLJ-ACR1 and ACR2 (Parallel Use) for Greater Frequency Resolution

FLJ-UR Suffix		-1 (Low Range)			-2 (High Range)		
Frequency Set Mode	-ACR2	BCD	BCD	BCD+1	BCD	BCD	BCD+1
	-ACR1	BCD	BCD+1	BCD	BCD	BCD+1	BCD
From		0*	10	100	0*	100	1k
To		1.59k	1.60k	1.69k	15.9k	16.0k	16.9k
Resolution		10	10	10	100	100	100

* Output saturates at 11V dc with zero logic code input (0000); however, digital code corresponds to value of f_c directly.

PERFORMANCE

Frequency Set Error ±1% or less

CONTROL CHARACTERISTICS Logic Code BCD 1 digit (1, 2, 4, 8)

Logic and Level 0V: ON
 +5V or Open: OFF

POWER SUPPLIES AND ENVIRONMENT

Power Supply/(Operating Range) ±15V (±5V to ±18V)

Current +6.2mA, -1.2mA

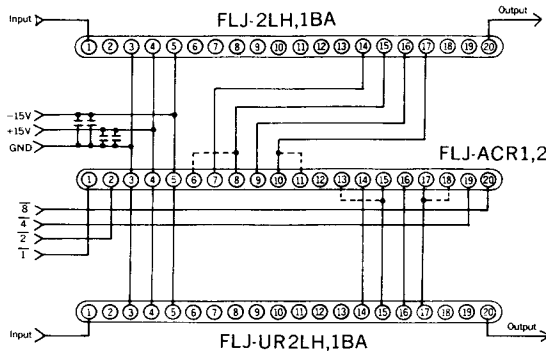
Operating Temperature Range 0 to 70°C

Storage Temperature Range -30°C to 80°C

Operating Humidity Range 10% to 95% RH

Storage Temperature Range 10% to 80% RH

TYPICAL CONNECTION (Fig. 3)



ORDERING INFORMATION

MODEL RESISTANCE

FLJ-ACR1 1.59 MΩ
 FLJ-ACR2 159 KΩ

for FLJ-UR Filter Series