

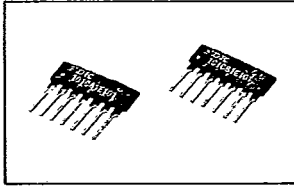
DELAY LINE MODULES

T-47-13

The delay line modules of FDK are the lumped constant elements consisting of low loss ferrite cores of original materials and laminated ceramic chip capacitors with a superb temperature coefficient. A fast rise and a low distortion rate are realized in these modules through a combination of electromagnetic and winding technologies deriving from many years of experience. In total

conformity with the MIL-STD-202E, the modules ensure a high level of reliability. Active delay line modules containing TTL logic elements are also available, and FDK designs and supplies a wide selection of delay line modules in response to customer's specific requirements.

●PASSIVE DELAY LINE C-61 SERIES (7pin-SIP type)



Features

- Capable of high-density mounting through ultra small, ultra thin single in-line structure
- Output 5 taps
- Low price

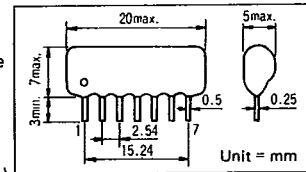
General specifications

Operating temperature : 0°C~+70°C
Storage temperature : -30°C~+100°C
Wave distortion : ±10% max.
Temperature coefficient : 150PPM/°C
Withstand voltage : DC 50V
Insulation resistance : 100MΩ @DC50V

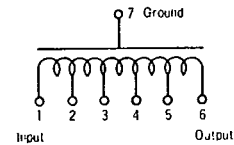
Model name coding

101 C61 E 101
— Characteristic impedance (100Ω = 10 × 10¹ = 101)
— No. of taps
— Shape
— Delay time (50ns. = 500, 100ns. = 101)

Shape and dimensions



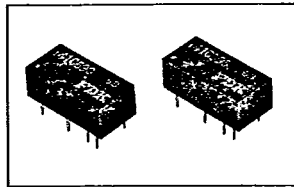
Pin location



Electrical characteristics

Model name	200C61E101	250C61E101	500C61E101	100C61E101	150C61E101	200C61E101	250C61E101	500C61E101	100C61E101	150C61E101	200C61E101	250C61E101	500C61E101	100C61E101	150C61E101	200C61E101	250C61E101	500C61E101	100C61E101
Total delay time Td(ns.) ±5%	20 ± 2.0	25 ± 3.0	50 ± 3.0	100	150	200	250	20 ± 2.0	25 ± 3.0	50 ± 3.0	100	150	200	20 ± 2.0	25 ± 3.0	50 ± 3.0	100	150	20 ± 2.0
Delay time between taps(ns.)	4 ± 1.5	5 ± 1.5	10 ± 2.0	20 ± 3.0	30 ± 3.0	40 ± 3.0	50 ± 3.0	4 ± 1.5	5 ± 1.5	10 ± 2.0	20 ± 3.0	30 ± 3.0	40 ± 3.0	4 ± 1.5	5 ± 1.5	10 ± 2.0	20 ± 3.0	30 ± 3.0	40 ± 3.0
Rise time Tr(ns.)max.	7.5	9.0	17.0	34.0	52.5	65.0	90.0	7.5	9.0	17.0	34.0	52.5	65.0	7.5	9.0	17.0	34.0	52.5	65.0
Characteristic impedance Z0(Ω) ±10%	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

●ACTIVE DELAY LINE C-59 SERIES (14pin-Dip type)



Features

- TTL with built-in IC
- Output 5 taps

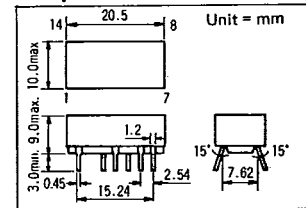
General specifications

Operating temperature : 0°C~+70°C
Storage temperature : -55°C~+125°C
Supply voltage : 5V±5% (+7V max.)

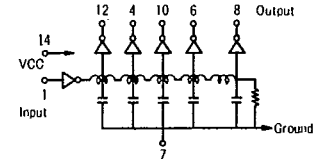
Model name coding

101 C59 S
— Built-in IC (S: 74S04, LS: 74LS04)
— Shape
— Delay time (50ns. = 500, 100ns. = 101)

Shape and dimensions



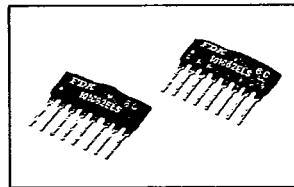
Pin location



Electrical characteristics

Model name	200C59S	250C59S	500C59S	750C59S	100C59S	150C59S	200C59S	250C59S	500C59S	750C59S	100C59S	150C59S	200C59S	250C59S
Total delay time Td(ns.) ±5%	20 ± 2.0	25 ± 2.0	50	75 ± 4.0	100	150	200	250	50	75 ± 4.0	100	150	200	250
Delay time between taps(ns.)	4 ± 2.0	5 ± 2.0	10 ± 2.0	15 ± 2.5	20 ± 3.0	30 ± 3.0	40 ± 3.0	50 ± 3.0	10 ± 3.0	15 ± 3.0	20 ± 3.0	30 ± 4.0	40 ± 4.0	50 ± 5.0
Rise time Tr(ns.)max.	3	3	3	3	3	3	3	3	4	4	4	4	4	4
Built-in IC	74S04	74S04	74S04	74S04	74S04	74S04	74S04	74LS04	74LS04	74LS04	74LS04	74LS04	74LS04	74LS04

●ACTIVE DELAY LINE C-62 SERIES (8pin-SIP type)



Features

- TTL with built-in IC
- Capable of high-density mounting through ultra small, ultra thin single-line structure
- Output 5 taps
- Low price

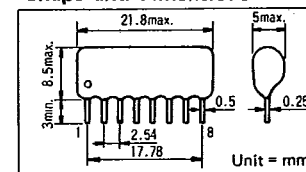
General specifications

Operating temperature : 0°C~+70°C
Storage temperature : -30°C~+100°C
Supply voltage : 5V±5% (+7V max.)

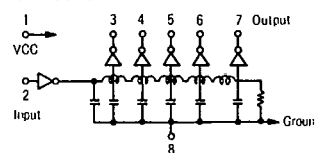
Model name coding

101 C62 E S
— Built-in IC (S: 74S04, LS: 74LS04)
— No. of taps
— Shape
— Delay time (50ns. = 500, 100ns. = 101)

Shape and dimensions



Pin location



Electrical characteristics

Model name	200C62ES	250C62ES	500C62ES	750C62ES	100C62ES	150C62ES	200C62ES	250C62ES	500C62ES	750C62ES	100C62ES	150C62ES	200C62ES	250C62ES
Total delay time Td(ns.) ±5%	20 ± 2.0	25 ± 2.0	50	75 ± 4.0	100	150	200	250	50	75 ± 4.0	100	150	200	250
Delay time between taps(ns.)	4 ± 2.0	5 ± 2.0	10 ± 2.0	15 ± 2.5	20 ± 3.0	30 ± 3.0	40 ± 3.0	50 ± 3.0	10 ± 3.0	15 ± 3.0	20 ± 3.0	30 ± 4.0	40 ± 4.0	50 ± 5.0
Rise time Tr(ns.)max.	3	3	3	3	3	3	3	3	4	4	4	4	4	4
Built-in IC	74S04	74S04	74S04	74S04	74S04	74S04	74S04	74LS04	74LS04	74LS04	74LS04	74LS04	74LS04	74LS04