

## MKT 075 SERIES CASE DIMENSIONS

### Case Dimensions in Millimeters 100V • 250V

| Capacitance<br>in $\mu\text{F}$ | VOLTAGE DC/AC             |      |     |     |                           |      |     |     |
|---------------------------------|---------------------------|------|-----|-----|---------------------------|------|-----|-----|
|                                 | 100 V DC / 63 V AC        |      |     |     | 250 V DC / 160 V AC       |      |     |     |
|                                 | Dimensions in Millimeters |      |     |     | Dimensions in Millimeters |      |     |     |
|                                 | L                         | H    | T   | S   | L                         | H    | T   | S   |
| 0.01                            |                           |      |     |     | 10.5                      | 9.0  | 4.0 | 7.5 |
| 0.015                           |                           |      |     |     | 10.5                      | 9.0  | 4.0 | 7.5 |
| 0.022                           |                           |      |     |     | 10.5                      | 9.0  | 4.0 | 7.5 |
| 0.033                           | 10.5                      | 9.0  | 4.0 | 7.5 | 10.5                      | 9.0  | 4.0 | 7.5 |
| 0.047                           | 10.5                      | 9.0  | 4.0 | 7.5 | 10.5                      | 9.0  | 4.0 | 7.5 |
| 0.068                           | 10.5                      | 9.0  | 4.0 | 7.5 | 10.5                      | 11.0 | 5.0 | 7.5 |
| 0.1                             | 10.5                      | 9.0  | 4.0 | 7.5 | 10.5                      | 11.0 | 5.0 | 7.5 |
| 0.15                            | 10.5                      | 9.0  | 4.0 | 7.5 | 10.5                      | 12.0 | 6.0 | 7.5 |
| 0.22                            | 10.5                      | 11.0 | 5.0 | 7.5 |                           |      |     |     |
| 0.33                            | 10.5                      | 12.0 | 6.0 | 7.5 |                           |      |     |     |

### Case Dimensions in Inches 100V • 250V

| Capacitance<br>in $\mu\text{F}$ | VOLTAGE DC/AC        |       |       |       |                      |       |       |       |
|---------------------------------|----------------------|-------|-------|-------|----------------------|-------|-------|-------|
|                                 | 100 V DC / 63 V AC   |       |       |       | 250 V DC / 160 V AC  |       |       |       |
|                                 | Dimensions in Inches |       |       |       | Dimensions in Inches |       |       |       |
|                                 | L                    | H     | T     | S     | L                    | H     | T     | S     |
| 0.01                            |                      |       |       |       | 0.413                | 0.354 | 0.157 | 0.295 |
| 0.015                           |                      |       |       |       | 0.413                | 0.354 | 0.157 | 0.295 |
| 0.022                           |                      |       |       |       | 0.413                | 0.354 | 0.157 | 0.295 |
| 0.033                           | 0.413                | 0.354 | 0.157 | 0.295 | 0.413                | 0.354 | 0.157 | 0.295 |
| 0.047                           | 0.413                | 0.354 | 0.157 | 0.295 | 0.413                | 0.354 | 0.157 | 0.295 |
| 0.068                           | 0.413                | 0.354 | 0.157 | 0.295 | 0.413                | 0.433 | 0.197 | 0.295 |
| 0.1                             | 0.413                | 0.354 | 0.157 | 0.295 | 0.413                | 0.433 | 0.197 | 0.295 |
| 0.15                            | 0.413                | 0.354 | 0.157 | 0.295 | 0.413                | 0.472 | 0.236 | 0.295 |
| 0.22                            | 0.413                | 0.433 | 0.197 | 0.295 |                      |       |       |       |
| 0.33                            | 0.413                | 0.472 | 0.236 | 0.295 |                      |       |       |       |

| Capacitance<br>in $\mu\text{F}$ | VOLTAGE DC/AC             |      |     |     |                           |      |     |     |
|---------------------------------|---------------------------|------|-----|-----|---------------------------|------|-----|-----|
|                                 | 400 V DC / 200 V AC       |      |     |     | 630 V DC / 250 V AC       |      |     |     |
|                                 | Dimensions in Millimeters |      |     |     | Dimensions in Millimeters |      |     |     |
|                                 | L                         | H    | T   | S   | L                         | H    | T   | S   |
| 0.001                           |                           |      |     |     | 10.5                      | 9.0  | 4.0 | 7.5 |
| 0.0015                          |                           |      |     |     | 10.5                      | 9.0  | 4.0 | 7.5 |
| 0.0022                          |                           |      |     |     | 10.5                      | 9.0  | 4.0 | 7.5 |
| 0.0033                          |                           |      |     |     | 10.5                      | 9.0  | 4.0 | 7.5 |
| 0.0047                          | 10.5                      | 9.0  | 4.0 | 7.5 | 10.5                      | 9.0  | 4.0 | 7.5 |
| 0.0068                          | 10.5                      | 9.0  | 4.0 | 7.5 | 10.5                      | 9.0  | 4.0 | 7.5 |
| 0.01                            | 10.5                      | 9.0  | 4.0 | 7.5 | 10.5                      | 11.0 | 5.0 | 7.5 |
| 0.015                           | 10.5                      | 9.0  | 4.0 | 7.5 | 10.5                      | 12.0 | 6.0 | 7.5 |
| 0.022                           | 10.5                      | 11.0 | 5.0 | 7.5 |                           |      |     |     |
| 0.033                           | 10.5                      | 12.0 | 6.0 | 7.5 |                           |      |     |     |

| Capacitance<br>in $\mu\text{F}$ | VOLTAGE DC/AC        |       |       |       |                      |       |       |       |
|---------------------------------|----------------------|-------|-------|-------|----------------------|-------|-------|-------|
|                                 | 400 V DC / 200 V AC  |       |       |       | 630 V DC / 250 V AC  |       |       |       |
|                                 | Dimensions in Inches |       |       |       | Dimensions in Inches |       |       |       |
|                                 | L                    | H     | T     | S     | L                    | H     | T     | S     |
| 0.001                           |                      |       |       |       | 0.413                | 0.354 | 0.157 | 0.295 |
| 0.0015                          |                      |       |       |       | 0.413                | 0.354 | 0.157 | 0.295 |
| 0.0022                          |                      |       |       |       | 0.413                | 0.354 | 0.157 | 0.295 |
| 0.0033                          |                      |       |       |       | 0.413                | 0.354 | 0.157 | 0.295 |
| 0.0047                          | 0.413                | 0.354 | 0.157 | 0.295 | 0.413                | 0.354 | 0.157 | 0.295 |
| 0.0068                          | 0.413                | 0.354 | 0.157 | 0.295 | 0.413                | 0.354 | 0.157 | 0.295 |
| 0.01                            | 0.413                | 0.354 | 0.157 | 0.295 | 0.413                | 0.433 | 0.197 | 0.295 |
| 0.015                           | 0.413                | 0.354 | 0.157 | 0.295 | 0.413                | 0.472 | 0.236 | 0.295 |
| 0.022                           | 0.413                | 0.433 | 0.197 | 0.295 |                      |       |       |       |
| 0.033                           | 0.413                | 0.472 | 0.236 | 0.295 |                      |       |       |       |

## MKTD01 SERIES

Formerly MPD 1 series

### INTRODUCTION:

The MKTD01 Series Metallized Polyester Film Capacitors cover a wide range of values and voltages. They are suitable for applications such as Blocking, By-passing and Coupling and are widely used in General communication equipment.

### FEATURES:

- Wide value and Voltage range
- Self healing capability
- Flame retardant powder epoxy encapsulation
- Minimum overall dimensions due to dip coated construction

### GENERAL SPECIFICATIONS:

**Dissipation factor:** < 0.0100 at 1 K Hz for capacitance  $\leq 1.0 \mu\text{F}$ , < 0.0150 at 1 K Hz for capacitance  $> 1.0 \mu\text{F}$   
**Insulation resistance:** For 100 VDC rated parts;  $\geq 9,000 \text{ M Ohms}$  for  $C \leq 0.33 \mu\text{F}$ ,  $\geq 3,000$  seconds for  $C > 0.33 \mu\text{F}$  at a temperature of  $25 \pm 5^\circ\text{C}$ , For 250 to 630 VDC rated parts  $\geq 15,000 \text{ M Ohms}$  for  $C \leq 0.33 \mu\text{F}$ ,  $\geq 5,000$  seconds for  $C > 0.33 \mu\text{F}$  at a temperature of  $25^\circ\text{C}$   
**Capacitance tolerance:**  $\pm 5\%$ (J),  $\pm 10\%$ (K) and  $\pm 20\%$ (M) (Special parts with close tolerance of  $\pm 2\%$  available on request)  
**Voltage Test :** 1.6 times the rated voltage applied between terminals for 2 seconds at a temperature of  $25^\circ\text{C}$   
**Temperature range:**  $-55$  to  $85^\circ\text{C}$  **Climatic category:** F M F

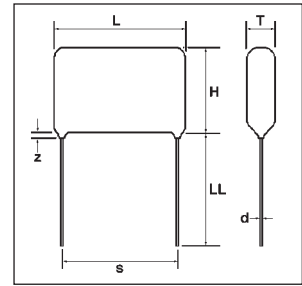
### LIFE TEST DETAILS:

Capacitors shall withstand 125% DC rated voltage or 100% AC rated voltage applied at  $85^\circ\text{C}$  for 1000 hours. After the test:

1. Capacitance change shall remain within  $\pm 5\%$
2. Dissipation Factor shall be within 1.5 times the original limits.
3. Insulation Resistance shall be above 50% of the initial limits.
4. There shall be no remarkable change in the appearance and the marking shall remain legible.

### DIMENSIONS AND TOLERANCES:

d - 0.6 mm (0.024")  
 for  
 Lead Spacing "s" = 10.0 mm (0.40")  
 d - 0.8 mm (0.032")  
 for  
 Lead Spacing "s" > 10.0 mm (0.40")  
 z - 1.5mm ( 0.06" )  
 max.  
 LL" - 20.0 mm min.(0.78")  
 Tolerance on LL"  $\pm 0.1 \text{ mm}$  (0.04")



### PULSE RISE TIME (dv/dt) Volts per usec.

| Rated Voltage | LEAD SPACING mm (inches) |                |                |                |
|---------------|--------------------------|----------------|----------------|----------------|
|               | 10.0<br>(0.40)           | 15.0<br>(0.60) | 22.5<br>(0.89) | 27.0<br>(1.06) |
| 100           | 6                        | 3              | 2              | 1              |
| 250           | 11                       | 7              | 4              | 3              |
| 400           | 20                       | 10             | 5.5            | 5              |
| 630           | 30                       | 15             | 8              | 7              |

## MKTD01 SERIES CASE DIMENSIONS

### Case Dimensions in Millimeters 100V • 250V • 400V • 630V

| Capacitance<br>in $\mu\text{F}$ | VOLTAGE DC/AC             |      |      |      |                           |      |      |      |
|---------------------------------|---------------------------|------|------|------|---------------------------|------|------|------|
|                                 | 100 V DC / 63 V AC        |      |      |      | 250 V DC / 160 V AC       |      |      |      |
|                                 | Dimensions in Millimeters |      |      |      | Dimensions in Millimeters |      |      |      |
|                                 | L                         | H    | T    | S    | L                         | H    | T    | S    |
| 0.01                            |                           |      |      |      | 12.5                      | 8.5  | 4.5  | 10.0 |
| 0.015                           |                           |      |      |      | 12.5                      | 9.0  | 4.5  | 10.0 |
| 0.022                           |                           |      |      |      | 12.5                      | 9.0  | 4.5  | 10.0 |
| 0.033                           |                           |      |      |      | 12.5                      | 9.0  | 4.5  | 10.0 |
| 0.047                           |                           |      |      |      | 12.5                      | 9.5  | 5.0  | 10.0 |
| 0.068                           |                           |      |      |      | 12.5                      | 9.5  | 5.0  | 10.0 |
| 0.1                             | 12.5                      | 9.5  | 5.0  | 10.0 | 12.5                      | 10.0 | 5.5  | 10.0 |
| 0.15                            | 12.5                      | 10.0 | 5.0  | 10.0 | 18.0                      | 10.5 | 5.5  | 15.0 |
| 0.22                            | 12.5                      | 10.0 | 5.5  | 10.0 | 18.0                      | 11.5 | 6.5  | 15.0 |
| 0.33                            | 18.0                      | 10.5 | 5.5  | 15.0 | 18.0                      | 12.5 | 7.0  | 15.0 |
| 0.47                            | 18.0                      | 11.5 | 6.0  | 15.0 | 26.0                      | 12.5 | 7.0  | 22.5 |
| 0.68                            | 18.0                      | 12.0 | 6.5  | 15.0 | 26.0                      | 14.5 | 8.0  | 22.5 |
| 1.0                             | 18.0                      | 14.0 | 7.5  | 15.0 | 26.0                      | 16.0 | 9.0  | 22.5 |
| 1.5                             | 26.0                      | 14.0 | 7.5  | 22.5 | 31.0                      | 17.0 | 9.5  | 27.0 |
| 2.2                             | 26.0                      | 16.0 | 9.0  | 22.5 | 31.0                      | 19.0 | 11.5 | 27.0 |
| 3.3                             | 26.0                      | 19.0 | 11.0 | 22.5 | 31.0                      | 23.0 | 14.0 | 27.0 |
| 4.7                             | 31.0                      | 23.0 | 12.0 | 27.0 | 31.0                      | 27.0 | 16.5 | 27.0 |
| 6.8                             | 31.0                      | 25.0 | 14.0 | 27.0 |                           |      |      |      |

### Case Dimensions in Inches 100V • 250V • 400V • 630V

| Capacitance<br>in $\mu\text{F}$ | VOLTAGE DC/AC        |       |       |       |                      |       |       |       |
|---------------------------------|----------------------|-------|-------|-------|----------------------|-------|-------|-------|
|                                 | 100 V DC / 63 V AC   |       |       |       | 250 V DC / 160 V AC  |       |       |       |
|                                 | Dimensions in Inches |       |       |       | Dimensions in Inches |       |       |       |
|                                 | L                    | H     | T     | S     | L                    | H     | T     | S     |
| 0.01                            |                      |       |       |       | 0.492                | 0.335 | 0.177 | 0.394 |
| 0.015                           |                      |       |       |       | 0.492                | 0.354 | 0.177 | 0.394 |
| 0.022                           |                      |       |       |       | 0.492                | 0.354 | 0.177 | 0.394 |
| 0.033                           |                      |       |       |       | 0.492                | 0.354 | 0.177 | 0.394 |
| 0.047                           |                      |       |       |       | 0.492                | 0.374 | 0.197 | 0.394 |
| 0.068                           |                      |       |       |       | 0.492                | 0.374 | 0.197 | 0.394 |
| 0.1                             | 0.492                | 0.374 | 0.197 | 0.394 | 0.492                | 0.394 | 0.217 | 0.394 |
| 0.15                            | 0.492                | 0.394 | 0.197 | 0.394 | 0.709                | 0.413 | 0.217 | 0.591 |
| 0.22                            | 0.492                | 0.394 | 0.217 | 0.394 | 0.709                | 0.453 | 0.256 | 0.591 |
| 0.33                            | 0.709                | 0.413 | 0.217 | 0.591 | 0.709                | 0.492 | 0.276 | 0.591 |
| 0.47                            | 0.709                | 0.453 | 0.236 | 0.591 | 1.024                | 0.492 | 0.276 | 0.886 |
| 0.68                            | 0.709                | 0.472 | 0.256 | 0.591 | 1.024                | 0.571 | 0.315 | 0.886 |
| 1.0                             | 0.709                | 0.551 | 0.295 | 0.591 | 1.024                | 0.630 | 0.354 | 0.886 |
| 1.5                             | 1.024                | 0.551 | 0.295 | 0.886 | 1.220                | 0.669 | 0.374 | 1.063 |
| 2.2                             | 1.024                | 0.630 | 0.354 | 0.886 | 1.220                | 0.748 | 0.453 | 1.063 |
| 3.3                             | 1.024                | 0.748 | 0.433 | 0.886 | 1.220                | 0.906 | 0.551 | 1.063 |
| 4.7                             | 1.220                | 0.906 | 0.472 | 1.063 | 1.220                | 1.063 | 0.650 | 1.063 |
| 6.8                             | 1.220                | 0.984 | 0.551 | 1.063 |                      |       |       |       |

| Capacitance<br>in $\mu\text{F}$ | VOLTAGE DC/AC             |      |      |      |                           |      |      |      |
|---------------------------------|---------------------------|------|------|------|---------------------------|------|------|------|
|                                 | 400 V DC / 200 V AC       |      |      |      | 630 V DC / 220 V AC       |      |      |      |
|                                 | Dimensions in Millimeters |      |      |      | Dimensions in Millimeters |      |      |      |
|                                 | L                         | H    | T    | S    | L                         | H    | T    | S    |
| 0.01                            | 12.5                      | 9.0  | 4.5  | 10.0 | 12.5                      | 9.0  | 4.5  | 10.0 |
| 0.015                           | 12.5                      | 9.5  | 4.5  | 10.0 | 12.5                      | 9.5  | 5.0  | 10.0 |
| 0.022                           | 12.5                      | 9.5  | 5.0  | 10.0 | 12.5                      | 10.5 | 6.0  | 10.0 |
| 0.033                           | 12.5                      | 10.5 | 5.5  | 10.0 | 18.0                      | 11.0 | 6.0  | 15.0 |
| 0.047                           | 12.5                      | 10.5 | 6.0  | 10.0 | 18.0                      | 11.5 | 6.5  | 15.0 |
| 0.068                           | 18.0                      | 10.5 | 6.0  | 15.0 | 18.0                      | 12.5 | 7.0  | 15.0 |
| 0.1                             | 18.0                      | 11.5 | 6.5  | 15.0 | 26.0                      | 13.0 | 7.0  | 22.5 |
| 0.15                            | 26.0                      | 12.5 | 6.0  | 22.5 | 26.0                      | 14.0 | 8.5  | 22.5 |
| 0.22                            | 26.0                      | 13.5 | 7.0  | 22.5 | 26.0                      | 16.5 | 10.0 | 22.5 |
| 0.33                            | 26.0                      | 15.5 | 8.5  | 22.5 | 31.0                      | 17.5 | 10.5 | 27.0 |
| 0.47                            | 26.0                      | 18.0 | 9.5  | 22.5 | 31.0                      | 19.5 | 12.0 | 27.0 |
| 0.68                            | 31.0                      | 17.5 | 10.0 | 27.0 | 31.0                      | 22.5 | 15.0 | 27.0 |
| 1.0                             | 31.0                      | 20.0 | 12.0 | 27.0 | 31.0                      | 27.5 | 19.0 | 27.0 |
| 1.5                             | 31.0                      | 23.5 | 13.5 | 27.0 |                           |      |      |      |
| 2.2                             | 31.0                      | 26.0 | 16.5 | 27.0 |                           |      |      |      |

| Capacitance<br>in $\mu\text{F}$ | VOLTAGE DC/AC        |       |       |       |                      |       |       |       |
|---------------------------------|----------------------|-------|-------|-------|----------------------|-------|-------|-------|
|                                 | 400 V DC / 200 V AC  |       |       |       | 630 V DC / 220 V AC  |       |       |       |
|                                 | Dimensions in Inches |       |       |       | Dimensions in Inches |       |       |       |
|                                 | L                    | H     | T     | S     | L                    | H     | T     | S     |
| 0.01                            | 0.492                | 0.354 | 0.177 | 0.394 | 0.492                | 0.354 | 0.177 | 0.394 |
| 0.015                           | 0.492                | 0.374 | 0.177 | 0.394 | 0.492                | 0.374 | 0.197 | 0.394 |
| 0.022                           | 0.492                | 0.374 | 0.197 | 0.394 | 0.492                | 0.413 | 0.236 | 0.394 |
| 0.033                           | 0.492                | 0.413 | 0.217 | 0.394 | 0.709                | 0.433 | 0.236 | 0.591 |
| 0.047                           | 0.492                | 0.413 | 0.236 | 0.394 | 0.709                | 0.453 | 0.256 | 0.591 |
| 0.068                           | 0.709                | 0.413 | 0.236 | 0.591 | 0.709                | 0.492 | 0.276 | 0.591 |
| 0.1                             | 0.709                | 0.453 | 0.256 | 0.591 | 1.024                | 0.512 | 0.276 | 0.886 |
| 0.15                            | 1.024                | 0.492 | 0.236 | 0.886 | 1.024                | 0.551 | 0.335 | 0.886 |
| 0.22                            | 1.024                | 0.531 | 0.276 | 0.886 | 1.024                | 0.650 | 0.394 | 0.886 |
| 0.33                            | 1.024                | 0.610 | 0.335 | 0.886 | 1.220                | 0.689 | 0.413 | 1.063 |
| 0.47                            | 1.024                | 0.709 | 0.374 | 0.886 | 1.220                | 0.768 | 0.472 | 1.063 |
| 0.68                            | 1.220                | 0.689 | 0.394 | 1.063 | 1.220                | 0.886 | 0.591 | 1.063 |
| 1.0                             | 1.220                | 0.787 | 0.472 | 1.063 | 1.220                | 1.083 | 0.748 | 1.063 |
| 1.5                             | 1.220                | 0.925 | 0.531 | 1.063 |                      |       |       |       |
| 2.2                             | 1.220                | 1.024 | 0.650 | 1.063 |                      |       |       |       |

## MKT D02 SERIES

Formerly MPD 2 series

### INTRODUCTION:

The MKTD02 Series Metallized Polyester Film Capacitors cover a wide range of values and voltages. This series has lead spacing starting from 7.5mm. and covers more values than the conventional series. They are suitable for applications such as Blocking, Bypassing and Coupling and are widely used in General communication equipment.

### FEATURES:

- Wide value and Voltage range
- Self healing capability
- Flame retardant powder epoxy encapsulation
- Minimum overall dimensions due to dip coated construction

### GENERAL SPECIFICATIONS:

**Dissipation factor:** < 0.0100 at 1 K Hz for capacitance  $\leq$  1.0  $\mu\text{F}$ , < 0.0150 at 1 K Hz for capacitance > 1.0  $\mu\text{F}$ . **Insulation resistance:** For 100 VDC rated parts;  $\geq$  9,000 M Ohms for  $C \leq$  0.33  $\mu\text{F}$ ,  $\geq$  3,000 seconds for  $C >$  0.33  $\mu\text{F}$  at a temperature of  $25 \pm 5^\circ\text{C}$ . For 250 to 630 VDC rated parts;  $\geq$  15,000 M Ohms for  $C \leq$  0.33  $\mu\text{F}$ ,  $\geq$  5,000 seconds for  $C >$  0.33  $\mu\text{F}$  at a temperature of  $25 \pm 5^\circ\text{C}$ . **Capacitance tolerance:**  $\pm 5\%$ (J),  $\pm 10\%$ (K) and  $\pm 20\%$ (M) **Voltage Test :** 1.6 times the rated voltage applied between terminals for 2 seconds. at a temperature of  $25 \pm 5^\circ\text{C}$ . **Temperature range:** -55 to  $85^\circ\text{C}$  **Climatic category:** F M F

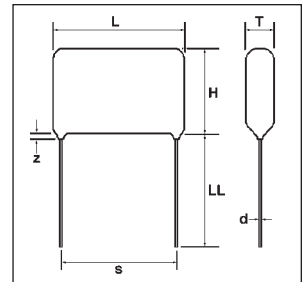
### LIFE TEST DETAILS:

Capacitors shall withstand 125% DC rated voltage or 100% AC rated voltage applied at  $85^\circ\text{C}$  for 1000 hours. After the test:

1. Capacitance change shall remain within  $\pm 5\%$ .
2. Dissipation Factor shall be within 1.5 times the original limits.
3. Insulation Resistance shall be above 50% of the initial limits.
4. There shall be no remarkable change in the appearance and the marking shall remain legible.

### DIMENSIONS AND TOLERANCES:

d - 0.6 mm (0.024")  
for  
Lead Spacing "s" =  
10.0 mm (0.40")  
d - 0.8 mm (0.032")  
for  
Lead Spacing "s" >  
10.0 mm (0.40")  
z - 1.5mm (0.06")  
max.  
LL" - 20.0 mm min.(0.78")  
Tolerance on "s"  $\pm$  1.0mm (0.04")



### PULSE RISE TIME (dv/dt) Volts per usec.

| Rated Voltage | LEAD SPACING mm (inches) |             |             |             |             |
|---------------|--------------------------|-------------|-------------|-------------|-------------|
|               | 7.5 (0.30)               | 10.0 (0.40) | 15.0 (0.60) | 22.5 (0.89) | 27.5 (1.08) |
| 100           | 6                        | 6           | 3           | 2           | 1           |
| 250           | 15                       | 11          | 7           | 4           | 3           |
| 400           | 30                       | 20          | 10          | 5.5         | 5           |
| 630           | 40                       | 30          | 15          | 8           | 7           |