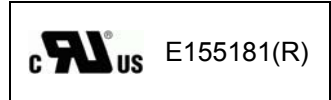


MINI TYPE SOLID STATE RELAY ESR4 SERIES



FEATURES

- Optically Isolated
- Ultra slim and light weight, SIL terminals type for high density mounting
 - Size: 5 (W)×20 (L)×17 (H) mm
 - Weight: approximately 3.0g
- Low On-State Resistance
- Low Input Power Consumption
- TTL and CMOS Compatible
- MOSFET Output Thyristor (DC Output Only)

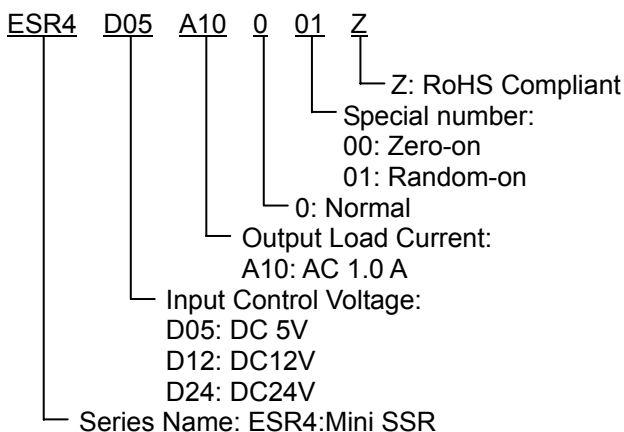


APPLICATIONS

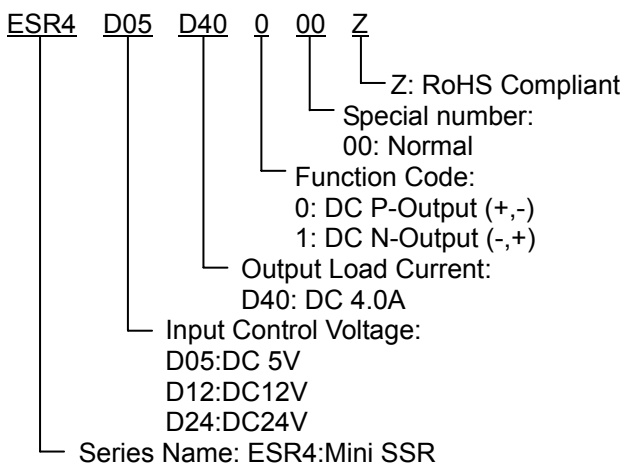
- Temperature Control System
- Industrial Automatic Control
- Lighting System
- Office Appliances
- Factory Appliances

PART NUMBER SYSTEM

AC OUTPUT (Red)



DC OUTPUT (Gray)

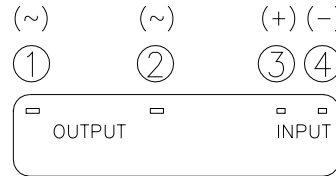
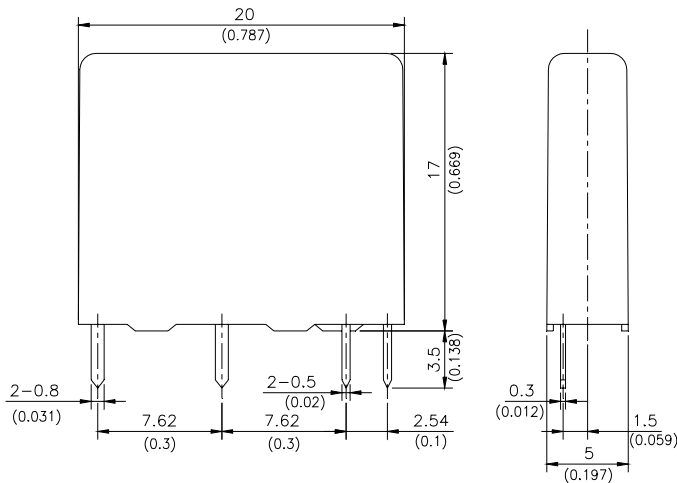




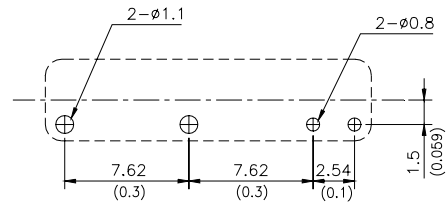
■ DIMENSIONS

ESR4 AC OUTPUT SERIES

DIMENSIONS UNIT: mm(inch)

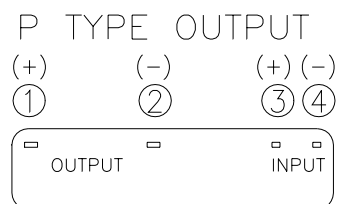
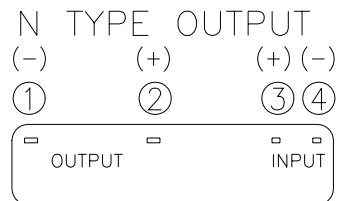
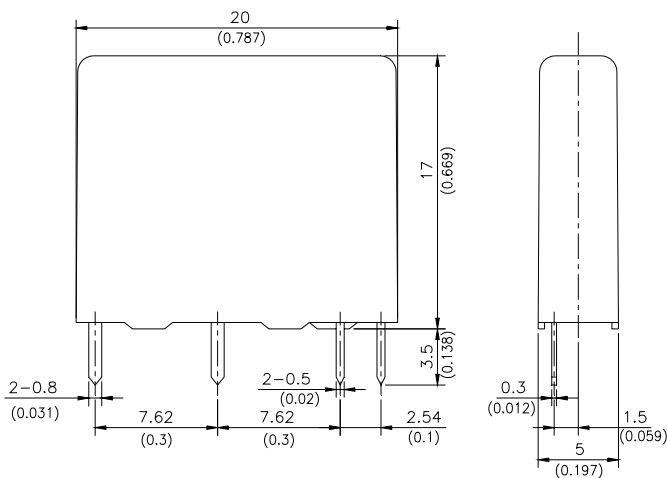


P.C.B. Layout

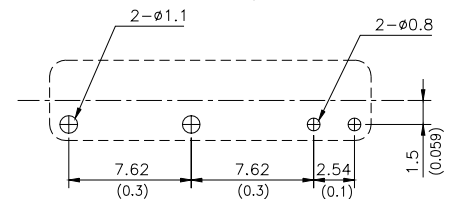


ESR4 DC OUTPUT SERIES

DIMENSIONS UNIT: mm(inch)



P.C.B. Layout



■ SPECIFICATIONS

◆ AC OUTPUT

| DESCRIPTION | TYPES | ESR4 | | |
|---|-------|------------------------------------|-----------|-----------|
| | | D05A10001 | D12A10001 | D24A10001 |
| ■ INPUT CIRCUIT | | | | |
| Nominal Voltage | | 5VDC | 12VDC | 24VDC |
| Control Voltage Range | | 3~10VDC | 7~20VDC | 18~32VDC |
| Control Current | | 12mA | 10mA | 7.7mA |
| Min. Turn-off Voltage | | 1VDC | | |
| Input Impedance | | 320Ω | 1070Ω | 3000Ω |
| ■ OUTPUT CIRCUIT | | | | |
| Max. Load Current | | 1.0A | | |
| Min. Load Current | | 50mA | | |
| Nominal load Voltage | | 240VAC | | |
| Load Voltage Range | | 24~265VAC | | |
| Non-Repetitive Max. Voltage | | 600V | | |
| Non-Repetitive Max. Peak Current | | 50A | | |
| Max. Off-state Leakage Current | | 2.0mA | | |
| Max. On-state Voltage Drop | | 1.5V | | |
| Zero-on or Random-on | | R | | |
| Max. Turn -on Time | | 1ms | | |
| Maximum Soldering Heat | | 220°C (10sec) | | |
| Max. Turn-off Time | | 1/2 cycle + 1ms | | |
| Insulation Resistance | | 1000MΩ, DC 500V (for input-output) | | |
| Dielectric Strength (Between Input & Output) | | 2500Vrms, 60sec (for input-output) | | |
| Operating Temperature Range | | -30°C to +85°C | | |
| Storage Temperature Range | | -40°C to +100°C | | |

■ SPECIFICATIONS

◆ DC OUTPUT

| DESCRIPTION | TYPES | ESR4 | | |
|---|-------|------------------------------------|-----------|-----------|
| | | D05D40*00 | D12D40*00 | D24D40*00 |
| ■ INPUT CIRCUIT | | | | |
| Nominal Voltage | | 5VDC | 12VDC | 24VDC |
| Control Voltage Range | | 3~10VDC | 7~20VDC | 18~32VDC |
| Control Current | | 12mA | 10mA | 7.7mA |
| Min. Turn-off Voltage | | 1VDC | | |
| Input Impedance | | 320Ω | 1070Ω | 3000Ω |
| ■ OUTPUT CIRCUIT | | | | |
| Max. Load Current | | 4A | | |
| Min. Load Current | | 1mA | | |
| Nominal Load Voltage | | 24VDC | | |
| Load Voltage Range | | 0-30VDC | | |
| Max. Peak Current | | 7A (10ms) | | |
| Max. Off-state Leakage Current | | <1mA | | |
| Max. On-state Voltage Drop(2A) | | 0.24V | | |
| Max. Turn -on Time | | 1ms | | |
| Max. Turn-off Time | | 0.1ms | | |
| Operating Switching Frequency | | 10Hz | | |
| Maximum Soldering Heat | | 220°C (10sec) | | |
| Insulation Resistance | | 1000MΩ, DC 500V (for input-output) | | |
| Dielectric Strength (Between Input & Output) | | 3750Vrms, 60sec (for input-output) | | |
| Operating Temperature Range | | -20°C to + 80°C | | |
| Storage Temperature Range | | -25°C to +80°C | | |