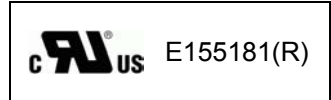


MINI SOLID STATE RELAY ESR4 SERIES



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)

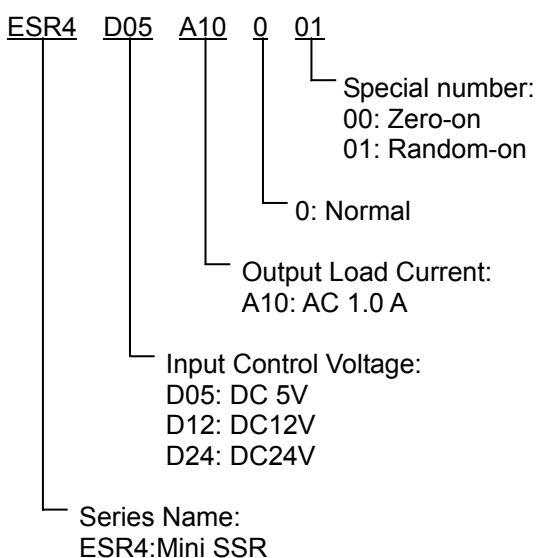


APPLICATIONS

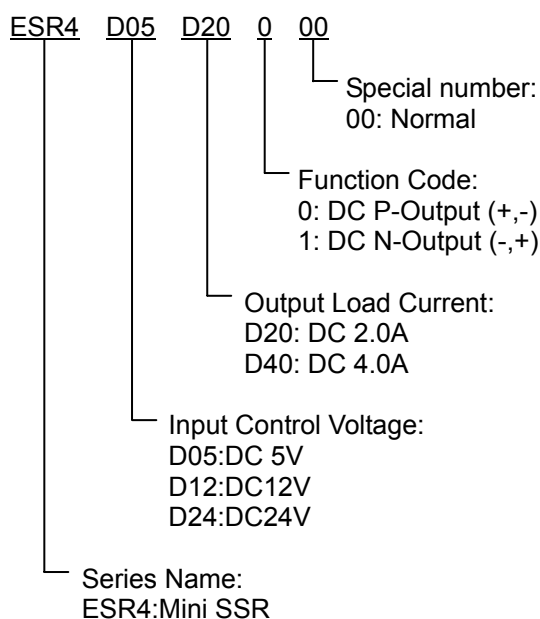
- Temperature Control System
- Industrial Automatic Control
- Lighting System
- Office Appliances
- Factory Appliances

PART NUMBER SYSTEM

AC OUTPUT (Red)



DC OUTPUT (Gray)

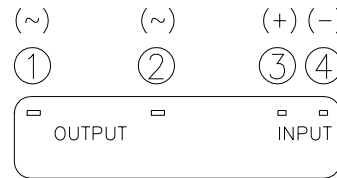
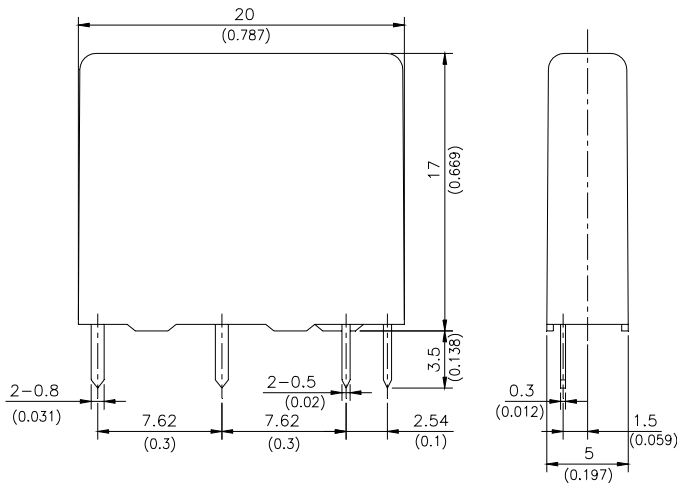




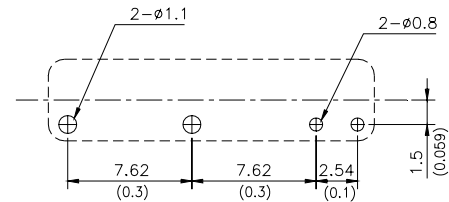
■ DIMENSIONS

ESR4 AC OUTPUT SERIES

DIMENSIONS UNIT: mm(inch)

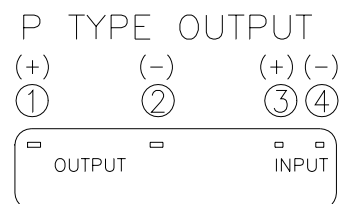
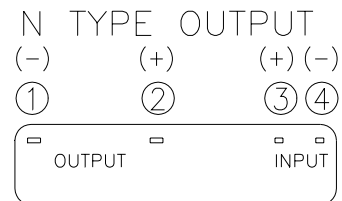
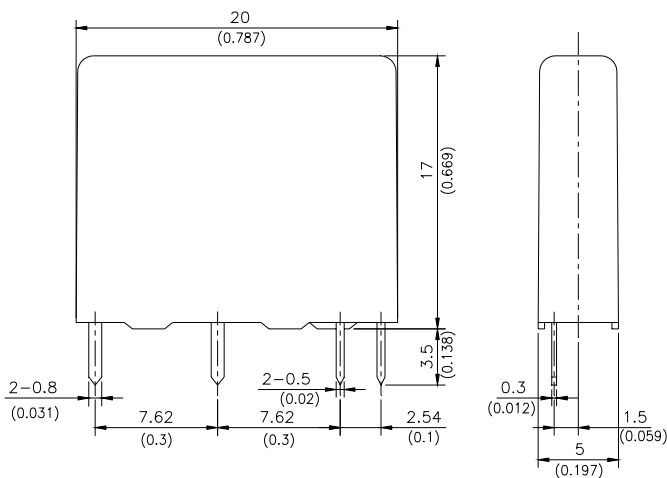


P.C.B. Layout

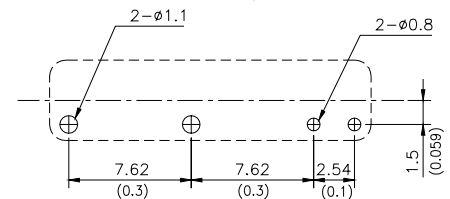


ESR4 DC OUTPUT SERIES

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					
		D05D20*00	D12D20*00	D24D20*00	D05D40*00	D12D40*00	D24D40*00
■ INPUT CIRCUIT							
Nominal Voltage		5VDC	12VDC	24VDC	5VDC	12VDC	24VDC
Control Voltage Range		3~10VDC	7~20VDC	18~32VDC	3~10VDC	7~20VDC	18~32VDC
Control Current		12mA	10mA	7.7mA	12mA	10mA	7.7mA
Min. Turn-off Voltage		1VDC					
Input Impedance		320Ω	1070Ω	3000Ω	320Ω	1070Ω	3000Ω
■ OUTPUT CIRCUIT							
Max. Load Current		2A			4A		
Min. Load Current		1mA					
Nominal Load Voltage		24VDC					
Load Voltage Range		0-30VDC					
Max. Peak Current		6A (10ms)			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					