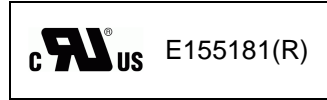


PCB MOUNT SOLID STATE RELAY ESR2 SERIES

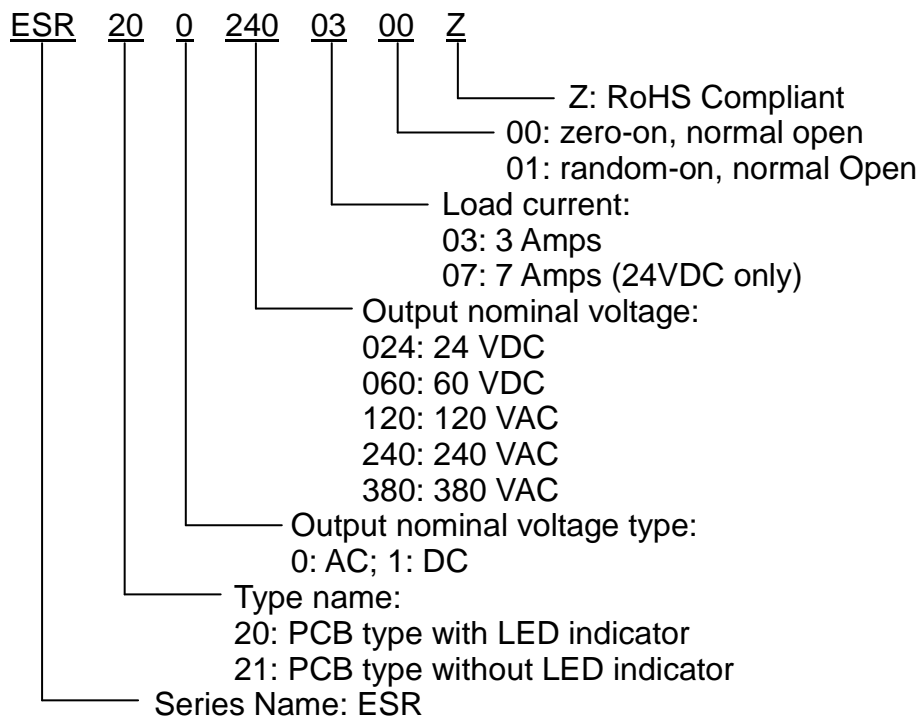


FEATURES

- PCB mount; single in line package.
- Optically isolated.
- Input LED Indicator.
- High dv/dt and high blocking voltage.
- Low input power consumption, TTL and CMOS compatible.
- Zero voltage turn-on, zero current turn-off (minizes EMI/RFI).
- High surge rating allows lamp and motor load switching.
- Built-in snubber network.



PART NUMBERING SYSTEM

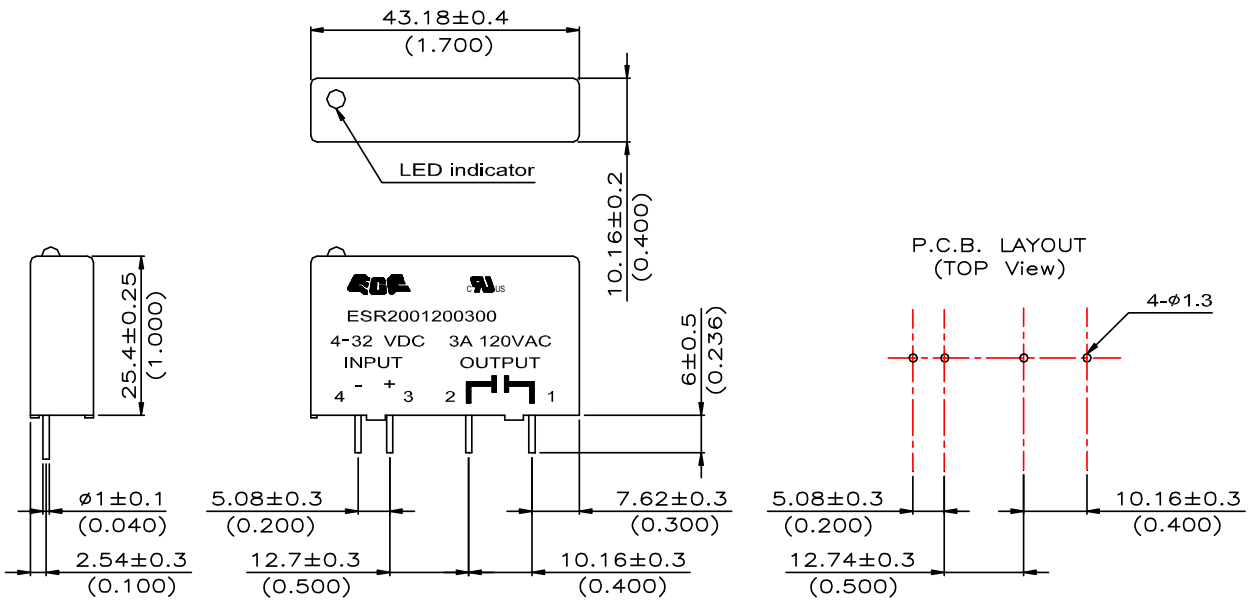




Rely on ECE's Relays,
and You Always Relax!

■ DIMENSIONS UNIT:mm(inch)

ESR2 SERIES





■ SPECIFICATIONS

◆ MAX. LOAD CURRENT: 3A (rms.)

Description \ Type	ESR200				ESR210			
	1200300	2400300	1200301	2400301	1200300	2400300	1200301	2400301
■ Input Circuit								
LED Indicate	YES				NO			
Control Voltage Range	4-32 VDC				3-32 VDC			
Max. Control Current	15mA				15mA			
Min. Turn-Off Voltage	1.5 VDC				1 VDC			
■ Output Circuit								
Load Type	AC				AC			
Max. Load Current	3A (rms)				3A (rms)			
Nominal Load Voltage (VAC)	120	240	120	240	120	240	120	240
Load Voltage Range (VAC)	24-140	24-280	24-140	24-280	24-140	24-280	24-140	24-280
Non-Repetitive Max. Peak Voltage (VAC)	400	600	400	600	400	600	400	600
Non-Repetitive Max. Peak Current	80A							
Max. Off-State Leakage Current	5mA							
Max. On-State Voltage Drop	1.5V							
Min. Load Current	50mA							
Max. Off-State Slew Rate (dv/dt)	100V/μs							
Operating Frequency Range	47Hz ~ 63Hz							
■ General Characteristics								
Zero-On or Random-on	Z		R		Z		R	
Max. Turn-On Time (60Hz)	8.3ms		100μs		8.3ms		100μs	
Max. Turn-Off Time (60Hz)	8.3ms		8.3ms		8.3ms		8.3ms	
Insulation Resistance	DC 500V 10 ⁸ Ω Min. (Between input & output, input / output & case)							
Dielectric Strength	2.5K VAC (Between Input & Output)							
Capacitance (Input to Output)	10pF Max. (Between Input & Output)							
Operating Temperature	-20°C ~ +85°C							
Storage Temperature	-40°C ~ +100°C							



◆ MAX. LOAD CURRENT: 3A (rms.)

Type	ESR201	ESR211	ESR200	ESR210
Description	0600301	0600301	3800300	3800300
■ Input Circuit				
LED Indicate	YES	NO	YES	NO
Control Voltage Range	4-32 VDC	3-32 VDC	4-32 VDC	3-32 VDC
Max. Control Current	15mA	15mA	16mA	16mA
Min. Turn-Off Voltage	1.5 VDC	1 VDC	1.5 VDC	1 VDC
■ Output Circuit				
Load Type	DC		AC	
Max. Load Current	3A		3A (rms)	
Nominal Load Voltage	60 VDC		380 VAC	
Load Voltage Range	3-60 VDC		48-415 VAC	
Non-Repetitive Max. Peak Voltage	60 VDC		800 VAC	
Non-Repetitive Max. Peak Current	5A		120A	
Max. Off-State Leakage Current	1mA		5mA	
Max. On-State Voltage Drop	1.5V		1.6V	
Min. Load Current	10mA		50mA	
Max. Off-State Slew Rated (dv/dt)			500V/μs	
Operating Frequency Range			47Hz ~ 63Hz	
■ General Characteristics				
Zero-On or Random-on	R		Z	
Max. Turn-On Time (60Hz)	50μs		8.3ms	
Max. Turn-Off Time (60Hz)	100μs		8.3ms	
Insulation Resistance	DC 500V 10 ⁸ Ω Min. (Between input & output, input / output & case)			
Dielectric Strength	3.5K VAC (Between Input & Output)		3.5K VAC (Between Input & Output)	
Capacitance (Input to Output)	10pF Max. (Between Input & Output)		10pF Max. (Between Input & Output)	
Operating Temperature	-20°C ~ +80°C		-20°C ~ +80°C	
Storage Temperature	-40°C ~ +100°C		-40°C ~ +100°C	



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◆ MAX. LOAD CURRENT: 7A (rms.)

Type	ESR201	ESR211
Description	0240701	0240701
■ Input Circuit		
LED Indicate	YES	NO
Control Voltage Range	4-32 VDC	3-32 VDC
Control Current (mAdc)	15mA Max.	15mA Max.
Min. Turn-Off Voltage	1 VDC	1 VDC
■ Output Circuit		
Load Type	DC	
Max. Load Current (A)	7 Adc	
Nominal Load Voltage	24 VDC	
Load Voltage Range	0-32 VDC	
Non Repetitive Overload Current	30A	
On State Voltage Drop (at IL=7A)	0.42V	
Static Output on-Resistance (at IL=7A)	60mΩ	
Off State Leakage Current	<1mA	
Min. Load Current	1mA	
Turn on Time (at Nominal Voltage)	50μs	
Turn off Time (at Nominal Voltage)	600μs	
Operating Switching Frequency	10Hz	
Breakdown Voltage(<1mA)	51V	
Power Dissipation	1W	
■ General Characteristics		
Operating Temperature Range	-20°C / +80°C	
Storage Temperature Range	-25°C / +80°C	
Insulation Resistance	DC 500V 10 ⁸ Ω Min. (Between Input & Output, Input / Output & Case)	
Dielectric Strength	3.5K Vrms, 1minute (Between Input & Output)	
Capacitance	10pF Max. (Between Input & Output)	
Max. Soldering Heat	260°C (10sec)	
Weight	18g	