General Purpose

Power Relays

SZR-LY Series

COIL RATINGS (DPDT)

		Rated Current (mA)			Coil Inductance (H)					
	Rated Voltage (V)	50 Hz	60 Hz	Coil resistance (Ω)	Armature OFF	Armature ON	Pick-up Voltage (V)	Dropout Voltage (V)	Maximum Voltage (V)	Power Consumption (W)
	6	214.1	183	12.2	0.04	0.08				Approx.
	12	106.5	91	46	0.17	0.33				1.0 W to 1.2 W
	24	53.8	46	180	0.69	1.3	Max.	Min.		(60 Hz)
AC	50	25.7	22	788	3.22	5.66	80 %	30%	110%	
	100/110	11.7/12.9	10/11	3,750	14.54	24.6				Approx
	110/120	9.9/10.8	8.4/9.2	4,430	19.2	32.1				0.9 W to 1.1 W
	200/220	6.2/6.8	5.3/5.8	12,950	54.75	94.07				(60 Hz)
	220/240	4.8/5.3	4.2/4.6	18,790	83.5	136.4				
	6	150)	40	0.17	0.33				
	12	75		160	0.73	1.37	Max.	Min.		Approx.
DC	24	36.9		650	3.2	5.72	80%	10%	110%	0.9 W
	48	18.5		2,600	10.6	21.0				
	100/110	9.1/10		11,000	45.6	86.2	1			

COIL RATINGS (4PDT)

		Rated Current (mA)			Coil Inductance (H)		1			
	Rated Voltage (V)	50 Hz	60 Hz	Coil resistance (Ω)	Armature OFF	Armature ON	Pick-up Voltage (V)	Dropout Voltage (V)	Maximum Voltage (V)	Power Consumption (W)
	6	386	330	5	0.02	0.04				
	12	199	170	20	0.1	0.17				Approx.
	24	93.6	80	78	0.38	0.67	Max.	Min.		1.95 W to 2.5 W
AC	50	46.8	40	350	1.74	2.88	80 %	30%	110%	(60 Hz)
	100/110	22.5/25.5	19/21.8	1,800	10.5	17.3				
	200/220	11.5/13.1	9.8/11.2	6,700	33.1	57.9				
	6	240		25	0.09	0.21				
DC	12	120		100	0.39	0.84	Max.	Min.		Approx.
	24	69		350	1.41	2.91	80%	10%	110%	1.5 W
	48	30		1,600	6.39	13.6				
	100/110	15/15.9		6,900	32	63.7				

Note 1: The rated current and coil resistance are measured at a coil temperature of 23 °C [73.4 °F] with tolerances of +15%, -20% for AC rated current and ± 15% for DC coil resistance.

Note 2: The rated current of N1 and X1 types is 4 mA higher than the value in the table above.

General Purpose

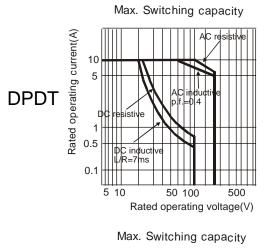
Power Relays

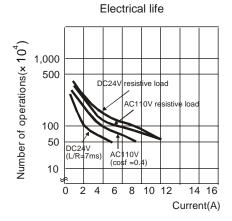
SPECIFICATIONS

SPECIFICATION	13						
Contact material		Silver Cadium Oxide					
Contact resistance	1	Max. 50 MOhm					
Operate time		Max. 25 ms					
Release time		Max. 25 ms					
Operating	Mechanical	18,000 operations per hour					
frequency	Electrical	1,800 operations per hour					
Insulation resistant	ce	Min. 100 Mw at 500 Vdc					
Dielectric withstand	d voltage	1,800 Vac 50 Hz/60 Hz for one minute between non-continuous current					
		carrying terminals and between coil thermals and contact terminals					
		1,000 Vac 50/60 Hz for 1 minute between contacts of same polarity					
Vibration	Mechanical durability	10 Hz to 55 Hz at double amplitude of 1.0 mm					
resistance	Malfunction durability	10 Hz to 55 Hz at double amplitude of 1.0 mm					
Shock resistance	Mechanical durability	1,000 m/s ² (approx. 100 g)					
	Malfunction durability	200 m/s² (approx. 20 g)					
Service life	Mechanical	AC: Min. 50 million operations (at operating frequency of 18,000 operations/hour)					
		DC: Min. 100 million operations (at operating frequency of 18,000 operations/hour)					
	Electrical	DPDT: Min. 500,000 operations (at operating frequency of 1,800 operations/hour)					
		4PDT: Min. 200,000 operations (at operating frequency of 1,800 operations/hour)					
Weight		DPDT: Approximately 35 g 4PDT: Approximately 65 g					

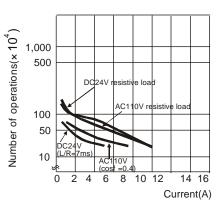
Note 1: The data shown above are of initial value

CHARACTERISTIC DATA





Electrical life



Rated operating current(A)

4PDT

10 5

0.5

0.1

5 10

າຣ

50 100

Rated operating voltage(V)

500