

SAMSON

SRD Series

Long Life Assurance(長壽命), High Ripple Current(高紋波)

FEATURES

1. High ripple current at high frequency, Load Life of 8000~10000 Hours at 105°C.
2. For electronic ballast, Power supply input circuit.



SPECIFICATIONS

Item	Performance Characteristics							
Operating Temperature Range	-25 to +105°C							
Rated Working Voltage Range	160 to 450V							
Nominal Capacitance Range	10 to 330μF							
Capacitance Tolerance	±20% (120Hz, +20°C)							
Leakage Current	$I \leq 0.06CV + 10(\mu A)$ after 2 minutes application of rated working voltage at +20°C (whichever greater)							
Dissipation Factor $\tan \delta$ (120Hz, +20°C)	Working Voltage (V)	160	200	250	350	400	450	
	$\tan \delta$ (max.)	0.15	0.15	0.15	0.20	0.20	0.20	
Low Temperature Characteristics	Impedance ratio max. at 120Hz							
	Working Voltage (V)	160	200	250	350	400	450	
Z-25°C / Z+20°C		3	3	3	6	6	6	
High Temperature Loading	Test conditions				Post test requirements at +20°C			
	Duration : ϕD	10	12.5~18		Leakage current : \leq Initial specified value			
	Load life	8000h	10000h		Cap. change : within ±20% of initial measured value			
	Ambient temp. : +105°C				$\tan \delta$: \leq 200% of initial specified value			
	Applied voltage : Rated DC working voltage with max ripple current							
Shelf Life	Test conditions				Post test requirements at +20°C			
	Duration : 1000 hours				Leakage current : \leq Initial specified value			
	Ambient temp. : +105°C				Cap. change : within ±20% of initial measured value			
	Applied voltage : (None)				$\tan \delta$: \leq 200% of initial specified value			
Others	JIS C - 5141 EIAJ RC - 2372							

CASE SIZE TABLE

	<table border="1"> <thead> <tr> <th>ϕD</th><th>10</th><th>12.5</th><th>16</th><th>18</th><th></th><th></th><th></th><th></th></tr> </thead> <tbody> <tr> <td>ϕ</td><td>5.0</td><td>5.0</td><td>7.5</td><td>7.5</td><td></td><td></td><td></td><td></td></tr> <tr> <td>ϕD</td><td>0.6</td><td>0.6</td><td>0.8</td><td>0.8</td><td></td><td></td><td></td><td></td></tr> <tr> <td>α</td><td colspan="4">(L < 20) 1.5</td><td>(L ≥ 20) 2.0</td><td></td><td></td><td></td></tr> <tr> <td>β</td><td colspan="4">(D < 20) 0.5</td><td>(D ≥ 20) 1.0</td><td></td><td></td><td></td></tr> </tbody> </table>	ϕD	10	12.5	16	18					ϕ	5.0	5.0	7.5	7.5					ϕD	0.6	0.6	0.8	0.8					α	(L < 20) 1.5				(L ≥ 20) 2.0				β	(D < 20) 0.5				(D ≥ 20) 1.0			
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RIPPLE CURRENT MULTIPLIER

Temperature Coefficient					Frequency Coefficient						
Temperature(°C)	~ 55	60	70	85	Freq.(Hz)	50	120	300	1K	10K	100K
Factor	2.23	2.17	2.00	1.75	100	0.30	0.40	0.55	0.70	0.90	1.00
					≥ 100	0.35	0.45	0.60	0.75	0.90	1.00

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DIMENSIONS

Voltage (Code)		160V		200V		250V		350V	
Cap.(μF)	Code	Case Size	Ripple Current						
10	106					10 x 16	380	10 x 20	350
15	156								
22	226	10 x 20	500	10 x 20	600	10 x 20	560	12.5 x 20	480
33	336	10 x 20	580	10 x 20	650	12.5 x 20	710	16 x 20	640
47	476	10 x 20	750	12.5 x 20	790	12.5 x 25	920	16 x 25	800
						16 x 20	990	18 x 20	
68	686	12.5 x 20	950	12.5 x 25	950	16 x 20	1000	16 x 30	1100
				16 x 20	1000			18 x 25	1000
82	826	12.5 x 25	1060	16 x 20	1100	16 x 25	1200	18 x 25	1100
						18 x 20	1200		
100	107	12.5 x 25	1170	16 x 25	1300	16 x 30	1500	18 x 30	1200
		16 x 20	1280	18 x 20	1280	18 x 25	1500		
150	157	16 x 25	1400	16 x 25	1400	18 x 30	1800		
		18 x 20	1400						
220	227	16 x 30	1700	18 x 30	2000	18 x 40	2100		
		18 x 25	1500	18 x 40	2400				
330	337	18 x 31.5	2000	18 x 40	2400				

Maximum Allowable Ripple Current (mA rms) at 105°C 100KHz

Case Size φD x L(mm)

Voltage (Code)		400V		450V					
Cap.(μF)	Code	Case Size	Ripple Current	Case Size	Ripple Current				
10	106	10 x 20	300	12.5 x 20	350				
15	156	12.5 x 20	410	12.5 x 25	560				
22	226	12.5 x 25	500	16 x 20	680				
		16 x 20	600						
33	336	16 x 20	730	16 x 30	850				
				18 x 25	850				
47	476	16 x 25	840	18 x 31.5	1000				
		18 x 20	840						
68	686	18 x 30	1200	18 x 40	1300				
82	826	18 x 40	1500						

Maximum Allowable Ripple Current (mA rms) at 105°C 100KHz

Case Size φD x L(mm)