



PSR Series

- Ultra Low ESR, High ripple current, High reliability, long life
- Rated voltage range : 2.5 to 16 Vdc
- 2000 hours at 105
- Suitable for DC – DC converters, voltage regulators and decoupling applications for computer motherboards



SPECIFICATIONS

Items	Characteristics	
Operating Temperature Range	- 55 ~ + 105	
Capacitance Tolerance	± 20 % (20 , 120Hz)	
Dissipation Factor (tan δ)	0.12 (max.) (20 , 120Hz)	
Surge Voltage	Rated voltage × 1.15V	
Leakage Current	I = 0.2CV . After 2 minutes application of rated voltage. 6.3 I = 0.5CV I= Leakage Current (μ A) C= Nominal Capacitance (μ F) V= Rated Voltage (If the leakage current is not stabilized, apply rated voltage for 120 minutes at 105)	
Equivalent series resistance (ESR)	Please see the attached standard products list.	
High temperature & Low temperature Characteristic	Z(-55)/Z(20)	0.75 ~ 1.25 (100KHZ)
	Z(+105)/Z(20)	0.75 ~ 1.25 (20)
Durability	After applying the rate voltage for 2000 hours at 105 and then being stabilized at 20 , capacitors shall meet the following limits.	
	Capacitance Change	Within ±20% of the initial value.
	Dissipation Factor	Not more than 150% of the specified value.
	ESR	Not more than 150% of the specified value.
Leakage Current	Not more than the specified value.	
High temperature & high humidity (Constant)	After storing for 1000 hours at 60 , 90~95%R.H.	
	Capacitance Change	Within ±20% of the initial value.
	Dissipation Factor	Not more than 150% of the specified value.
	ESR	Not more than 150% of the specified value.
Leakage Current	Not more than the specified value.	
Resistance to Soldering heat Flow method (260±5°C × 10s)	Capacitance Change	Within ±5% of the initial value.
	Dissipation Factor	Not more than the specified value.
	ESR	Not more than the specified value.
	Leakage Current	Not more than the specified value.
Surge Voltage Test	The capacitors shall be subjected to 1000 cycles each consisting of charge with the surge voltage specified at 105 for 30 seconds through a protective resistor(R=1kΩ) and discharge for 5 minutes 30 seconds.	
	Capacitance Change	Within ±20% of the initial value.
	Dissipation Factor	Not more than 150% of the specified value.
	ESR	Not more than 150% of the specified value.
Leakage Current	Not more than the specified value.	
Failure Rate	1% per 1000 hours maximum (Confidence level 60% at 105)	



PSR Series

STANDARD PRODUCTS

Size Code	Rated voltage V.DC	Nominal capacitance (μ F)	Max. permissible ripple current (mA r.m.s) (105 , 100KHz)	ESR (m Ω) Max. 20 , 100KHz	Part No.
0808	2.5	560	6100	7	2PSR561M0808
0809	2.5	820	6100	7	2PSR821M0809
0812	2.5	560	5600	7	2PSR561M0812
	2.5	820	5600	7	2PSR821M0812
	2.5	1000	6100	7	2PSR102M0812
	4	560	5600	7	4PSR561M0812
	6.3	220	5600	7	6PSR221M0812
	6.3	330	5600	7	6PSR331M0812
1012	2.5	1500	6100	7	2PSR152M1012
	4	820	6100	7	4PSR821M1012
	4	1200	6100	7	4PSR122M1012
	6.3	470	6100	7	6PSR471M1012
	6.3	560	6100	7	6PSR561M1012
	6.3	680	6100	7	6PSR681M1012
	6.3	820	6100	7	6PSR821M1012
	6.3	1000	6100	7	6PSR102M1012
	10	330	6100	7	10PSR331M1012
	10	470	6100	7	10PSR471M1012
	10	680	6100	7	10PSR681M1012