

PD Series

性能特点 Feature

- Feature: LOW ESR, Surface mounting, Reduced height, Wide temperature range
- Suitable for DC-DC converters, voltage regulators and decoupling applications
- Rate voltage: 2~25Vdc.
- Endurance: 1000hrs at 125°C
- RoHS Compliant



技术性能 Specifications

Item	Conditions	Characteristics	
Category Temperature Range		-55 to +125°C	
Rated Voltage Range		2 to 25 Vdc	
Capacitance Tolerance	at 20°C,120Hz	$\pm 20\%$ (M); Y: $+10\sim-35\%$ K: $\pm 10\%$	
Leakage Current	at 20°C after 2 minutes	I $\leq 0.1CV$ (2V.DC to 2.5V.DC) I $\leq 0.3CV$ (16V.DC to 25V.DC) I : Leakage Current(μA), C : Rated Capacitance(μF), V : Rated Voltage(V)	
Surge Voltage	15 to +35°C	Rated voltage x 1.25 (2V.DC to 16V.DC) Rated voltage x 1.15 (20V.DC to 25V.DC)	
Dissipation Factor (tanδ)	at 20°C, 120Hz	≤ 0.1	
Endurance	125°C, rated voltage applied,1000hrs.	Appearance	No significant damage
		Capacitance Change	$\pm 20\%$ of the initial value
		Dissipation Factor	$\leq 200\%$ of the initial specified value
		Leakage Current	within the initial specified value
Damp Heat, Steady State	60°C, 90 to 95%RH, 500 hrs.	Appearance	No significant damage
		Capacitance Change	+70%,-20% of the initial value (16 V.DC to 25 V.DC) +60%,-20% of the initial value
		Dissipation Factor	$\leq 200\%$ of the initial specified value
		Leakage Current	within the initial specified value 10 V.DC to 25 V.DC $\leq 300\%$ of the initial specified value
Surge Voltage	The capacitors shall be subjected to 1000 cycles each consisting of charge with the surge voltages, 125%rate voltage , at 15°C to 35°C for 30 seconds through a protective resistor(R=1KΩ)and discharge for 5min 30 seconds.	Appearance	No significant damage
		Capacitance Change	$\pm 10\%$ of the initial value
		Dissipation Factor	within the initial specified value
		Leakage Current	within the initial specified value
Solderability	Pb-free solder Around 25% rosin melted ethanol or isopropylalcohol Temperature : $245\pm 5^\circ\text{C}$ Immersing time : 2 ± 0.5 s	More than 95% of outer terminal surface to be covered	
Resistance to Solvents	Solvent : isopropylalcohol Immersing time : 30 ± 5 s Room temperature	No significant damage and marking readable	

PD Series

标准评级 Standard Ratings

WV(VDC)	Cap (μF)	tanδMax. @120Hz	Leakage Current Max.(μA)	ESR Max. (mΩ) @100kHz	Ripple Current (Arms) @100kHz
					150°C
2	1.6	330	0.1	66.0	9.0
		330	0.1	66.0	9.0
		330	0.1	66.0	6.0
2.5	2	330	0.1	82.5	9.0
		330	0.1	82.5	6.3
		330	0.1	82.5	7.5
16	16	47	0.1	225.6	40.0
		56	0.1	268.8	40.0
		15	0.1	112.5	40.0
25	25	33	0.1	247.5	40.0
					3.2

* 支持客户根据需求定制 Support customer customization according to demand

Temperature Compensation Multipliers for Ripple Current				
	T $\leq 45^\circ\text{C}$	45°C $< T \leq 85^\circ\text{C}$	85°C $< T \leq 105^\circ\text{C}$	125°C $< T$
2 V.DC to 2.5 V.DC	1.0	0.7	0.25	0.25
16 V.DC to 25 V.DC	1.0	0.8	0.5	0.25

产品标识 Product Identification

PD	<u>2R0</u>	S	471	E06	<input type="checkbox"/>
Product	Rated Voltage 2R0:2.0V	Case Height S: 1.9mm	Capacitance 471=470μF	ESR E05: 6mΩ	Suffix for special code
				E04: 4.5mΩ	Y: Capacitance +10~35°C
					K: Capacitance ±10%
					Blank space: Capacitance ±20%

尺寸和标记 Dimensions And Marking

Case size	L	WA	WB	H	P
s	7.3±0.3	4.3±0.3	2.4±0.2	1.9±0.3	1.3±0.2

