

台容积电

TAI RONG SMC

Surface Mount Type

SX series

[Low ESR products]

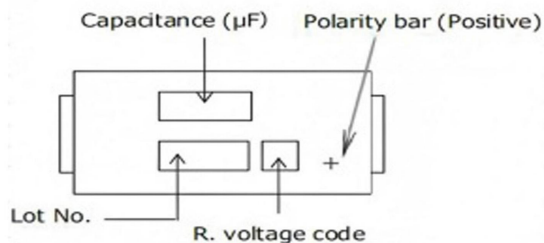
Features

- Large capacitance (560 μ F max.)
- Low ESR (4.5 m Ω to 9 m Ω max.)
- High ripple current (8500 mA r.m.s. max.)
- RoHS compliance, Halogen free

Specifications

Series	SX			
Category temp. range	-55 °C to +105 °C			
Rated voltage range	2.0 V.DC to 6.3 V.DC			
Nominal cap. range	82 μF to 560 μF			
Capacitance tolerance	±20 % (120 Hz / +20 °C)			
DC leakage current	I ≤ 0.1 CV (μA) 2 minutes			
Dissipation factor (tan δ)	≤ 0.06 (120 Hz / + 20 °C)			
Surge voltage (V.DC)	Rated voltage × 1.25 (15 °C to 35 °C)			
Endurance	+105 °C ± 2 °C, 2000 h, rated voltage applied			
	Capacitance change	Within ±20 % of the initial value		
	Dissipation factor (tan δ)	≤ 2 times of the initial limit		
	DC leakage current	≤ 3 times of the initial limit		
Damp heat (Steady state)	+60 °C, 90 %, 500 h, No-applied voltage			
	Capacitance change of initial measurd value	2.0 V.DC to 2.5 V.DC	4.0 V.DC	6.3 V.DC
		+70 %, -20 %	+60 %, -20 %	+50 %, -20 %
	Dissipation factor (tan δ)	≤ 2 times of the initial limit		
	DC leakage current	Within the initial limit		

Marking



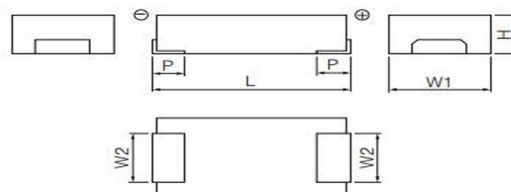
R. voltage code

d	2.0
e	2.5

Unit: V.DC

g	4.0
j	6.3

Dimensions (not to scale)



Unit: mm

Series	L ± 0.2	W1 ± 0.2	W2 ± 0.1	H ± 0.1	P ± 0.3
SX	7.3	4.3	2.4	1.9	1.3

* Externals of figure are the reference.

Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use.

Should a safety concern arise regarding this product, please be sure to contact us immediately.

www.trsmc.com.cn

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Characteristics list										
Series	Rated voltage (V.DC)	Capacitance (μ F)	Case size (mm)			Specification		Part number	Min. Packaging Q'ty*3 (pcs)	
			L	W	H	Ripple current*1 (mA r.m.s.)	ESR*2 (m Ω max.)			
SX	2.0	180	7.3	4.3	1.9	6300	9	EEFSX0D181ER	3500	
	2.0	220	7.3	4.3	1.9	6300	9	EEFSX0D221ER	3500	
	2.0	270	7.3	4.3	1.9	6300	9	EEFSX0D271ER	3500	
	2.0	270	7.3	4.3	1.9	7500	6	EEFSX0D271XE	3500	
	2.0	270	7.3	4.3	1.9	8500	4.5	EEFSX0D271E4	3500	
	2.0	330	7.3	4.3	1.9	6300	9	EEFSX0D331ER	3500	
	2.0	330	7.3	4.3	1.9	7500	6	EEFSX0D331XE	3500	
	2.0	330	7.3	4.3	1.9	8500	4.5	EEFSX0D331E4	3500	
	2.0	390	7.3	4.3	1.9	6300	9	EEFSX0D391ER	3500	
	2.0	390	7.3	4.3	1.9	7500	6	EEFSX0D391XE	3500	
	2.0	390	7.3	4.3	1.9	8500	4.5	EEFSX0D391E4	3500	
	2.0	470	7.3	4.3	1.9	6300	9	EEFSX0D471ER	3500	
	2.0	470	7.3	4.3	1.9	7500	6	EEFSX0D471XE	3500	
	2.0	470	7.3	4.3	1.9	8500	4.5	EEFSX0D471E4	3500	
	2.0	560	7.3	4.3	1.9	8500	4.5	EEFSX0D561E4	3500	
	2.5	150	7.3	4.3	1.9	6300	9	EEFSX0E151ER	3500	
	2.5	180	7.3	4.3	1.9	6300	9	EEFSX0E181ER	3500	
	2.5	220	7.3	4.3	1.9	6300	9	EEFSX0E221ER	3500	
	2.5	220	7.3	4.3	1.9	7000	7	EEFSX0E221E7	3500	
	2.5	270	7.3	4.3	1.9	7000	7	EEFSX0E271E7	3500	
	2.5	330	7.3	4.3	1.9	6300	9	EEFSX0E331ER	3500	
	2.5	330	7.3	4.3	1.9	7500	6	EEFSX0E331XE	3500	
	2.5	330	7.3	4.3	1.9	8500	4.5	EEFSX0E331E4	3500	
	2.5	390	7.3	4.3	1.9	6300	9	EEFSX0E391ER	3500	
	2.5	390	7.3	4.3	1.9	7500	6	EEFSX0E391XE	3500	
	2.5	390	7.3	4.3	1.9	8500	4.5	EEFSX0E391E4	3500	
	2.5	470	7.3	4.3	1.9	6300	9	EEFSX0E471ER	3500	
	2.5	470	7.3	4.3	1.9	7500	6	EEFSX0E471XE	3500	
	2.5	470	7.3	4.3	1.9	8500	4.5	EEFSX0E471E4	3500	
	4.0	82	7.3	4.3	1.9	6300	9	EEFSX0G820ER	3500	
	4.0	100	7.3	4.3	1.9	6300	9	EEFSX0G101ER	3500	
	4.0	150	7.3	4.3	1.9	6300	9	EEFSX0G151ER	3500	
	4.0	150	7.3	4.3	1.9	7000	7	EEFSX0G151E7	3500	
	4.0	180	7.3	4.3	1.9	6300	9	EEFSX0G181ER	3500	
	4.0	220	7.3	4.3	1.9	6300	9	EEFSX0G221ER	3500	
	4.0	270	7.3	4.3	1.9	6300	9	EEFSX0G271ER	3500	
	4.0	330	7.3	4.3	1.9	6300	9	EEFSX0G331ER	3500	
	4.0	330	7.3	4.3	1.9	7500	6	EEFSX0G331XE	3500	
	6.3	120	7.3	4.3	1.9	7000	7	EEFSX0J121E7	3500	
	6.3	150	7.3	4.3	1.9	6300	9	EEFSX0J151ER	3500	
	6.3	180	7.3	4.3	1.9	6300	9	EEFSX0J181ER	3500	
	6.3	220	7.3	4.3	1.9	6300	9	EEFSX0J221ER	3500	
*1: Ripple current (100 kHz / +45 °C) *2: ESR (100 kHz / +20 °C)										
*3: Please contact us when 500 pcs packing is necessary. ◆ Please refer to each page in this catalog for “Reflow conditions” and “Taping specifications” .										
Temperature coefficient of ripple current										
Temperature			T ≤ 45 °C			45 °C < T ≤ 85 °C		85 °C < T ≤ 105 °C		
2.0 V.DC to 6.3 V.DC		Coefficient	1.0			0.7		0.25		
◆ Ripple current should be controlled so that surface temperature of capacitor does not exceed the category temperature.										