

Type SPA Solid Polymer Aluminum SMT Capacitors



- Ultra-Low ESR – 5 m Ω to 9 m Ω @ 100 kHz
- High Ripple current – up to 4.0 Arms at 100 kHz
- Long Life – No dry out failure related mechanism
- Stable Impedance and ESR vs. Temperature
- Great for bulk storage and ripple filtering
- Ignition free

Applications

Motherboard By-Pass

Switching Supply Input/Output Filters

Power Supply Decoupling

High Frequency Noise Reduction

Laptop LCD Displays

Automotive Digital Equipment

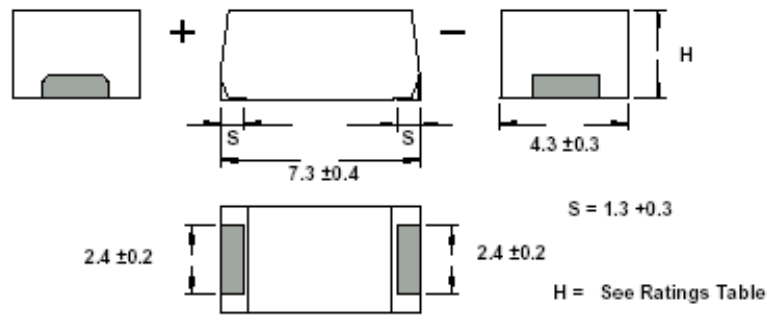
Portable Electronic Equipment

Specifications

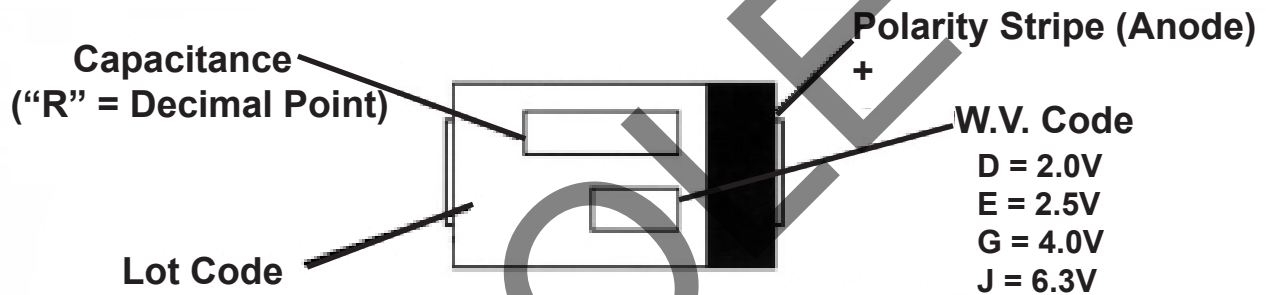
Operating Temperature:	-40 °C to +105 °C
Rated Voltage:	2 Vdc to 6.3 Vdc
Surge Voltage:	1.25 x Rated Voltage
Capacitance Range:	56 μ F to 470 μ F
Capacitance Tolerance:	\pm 20% @120 Hz, +20 °C
Dissipation Factor:	0.06 max (1.8/1.9); 0.10 max (2.8/4.2) (Case "H" mm; 120 Hz +20 °C)
DC Leakage Current:	$I \leq 0.06$ CV after 2 minutes
Load Life:	1000 h @ 105 °C Δ Capacitance: \pm 10% of the initial measured value D.F. \leq Initial specified value DCL \leq Initial specified value

Type SPA Solid Polymer Aluminum SMT Capacitors

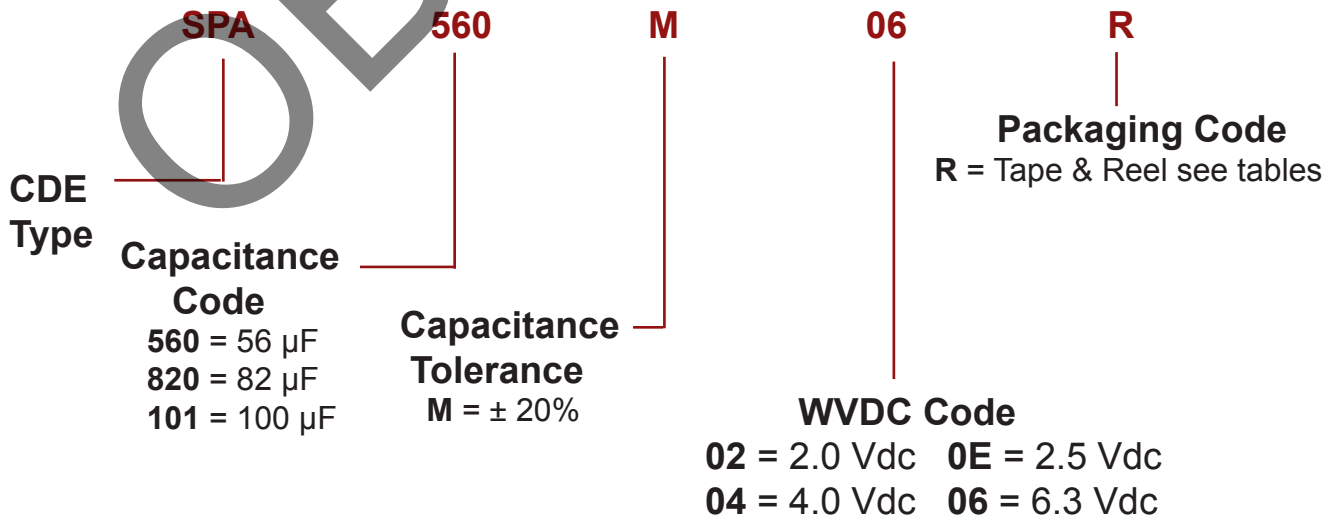
Outline Drawing



Markings



Ordering Information



Type SPA Solid Polymer Aluminum SMT Capacitors

Ratings

Capacitance (μ F)	Catalog Part Number (Tape & Reel)	Maximum E.S.R. 100 kHz/20 °C (Ω)	Maximum Ripple Current 100 kHz/105 °C (A _{rms})	Case Height H (mm)	Qty/Reel
2.0 Vdc					
120	SPA121M02R	0.009	3.0	1.8 ±.1	3500
150	SPA151M02R	0.009	3.0	1.8 ±.1	3500
180	SPA181M02R	0.009	3.0	1.9 ±.2	3500
270	SPA271M02R	0.007	3.5	2.8 ±.2	2000
330	SPA331M02R	0.007	3.5	2.8 ±.2	2000
390	SPA391M02R	0.005	4.0	4.2 ±.1	2000
470	SPA471M02R**	0.005	4.0	4.2 ±.1	2000
2.5 Vdc					
100	SPA101M0ER	0.009	3.0	1.8 ±.1	3500
120	SPA121M0ER	0.009	3.0	1.8 ±.1	3500
150	SPA151M0ER	0.009	3.0	1.9 ±.2	3500
220	SPA221M0ER	0.007	3.5	2.8 ±.2	2000
270	SPA271M0ER	0.007	3.5	2.8 ±.2	2000
330	SPA331M0ER	0.005	4.0	4.2 ±.1	2000
390	SPA391M0ER	0.005	4.0	4.2 ±.1	2000
4.0 Vdc					
82	SPA820M04R	0.009	3.0	1.8 ±.1	3500
100	SPA101M04R	0.009	3.0	1.9 ±.2	3500
150	SPA151M04R	0.007	3.5	2.8 ±.2	2000
220	SPA221M04R	0.005	4.0	4.2 ±.1	2000
6.3 Vdc					
56	SPA560M06R	0.009	3.0	1.8 ±.1	3500
68	SPA680M06R	0.009	3.0	1.9 ±.2	3500
120	SPA121M06R	0.007	3.5	2.8 ±.2	2000
180	SPA181M06R	0.005	4.0	4.2 ±.1	2000

Highlighted part numbers no longer available

Type SPA Solid Polymer Aluminum SMT Capacitors

Notice and Disclaimer: All product drawings, descriptions, specifications, statements, information and data (collectively, the "Information") in this datasheet or other publication are subject to change. The customer is responsible for checking, confirming and verifying the extent to which the Information contained in this datasheet or other publication is applicable to an order at the time the order is placed. All Information given herein is believed to be accurate and reliable, but it is presented without any guarantee, warranty, representation or responsibility of any kind, expressed or implied. Statements of suitability for certain applications are based on the knowledge that the Cornell Dubilier company providing such statements ("Cornell Dubilier") has of operating conditions that such Cornell Dubilier company regards as typical for such applications, but are not intended to constitute any guarantee, warranty or representation regarding any such matter – and Cornell Dubilier specifically and expressly disclaims any guarantee, warranty or representation concerning the suitability for a specific customer application, use, storage, transportation, or operating environment. The Information is intended for use only by customers who have the requisite experience and capability to determine the correct products for their application. Any technical advice inferred from this Information or otherwise provided by Cornell Dubilier with reference to the use of any Cornell Dubilier products is given gratis (unless otherwise specified by Cornell Dubilier), and Cornell Dubilier assumes no obligation or liability for the advice given or results obtained. Although Cornell Dubilier strives to apply the most stringent quality and safety standards regarding the design and manufacturing of its products, in light of the current state of the art, isolated component failures may still occur. Accordingly, customer applications which require a high degree of reliability or safety should employ suitable designs or other safeguards (such as installation of protective circuitry or redundancies or other appropriate protective measures) in order to ensure that the failure of an electrical component does not result in a risk of personal injury or property damage. Although all product-related warnings, cautions and notes must be observed, the customer should not assume that all safety measures are indicated in such warnings, cautions and notes, or that other safety measures may not be required.

OBSOLETE