

SMDGP (RVT) Series

FEATURES

- 105 °C standard, Load life=2000 hours
- Designed for surface mounting on high density PC board
- Designed for reflow soldering process
- General purpose applications, RoHS compliant



Marking Color: Black

SPECIFICATIONS

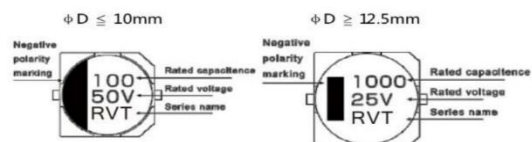
Category temperature range	-55℃ ~ 105 ℃																																			
Capacitance tolerance	±20% (120Hz / +20 ℃)																																			
Leakage current	$I \leq 0.01 CV$ or $3\mu A$ whichever is greater (after 2 minutes)																																			
Resistance to soldering heat	After reflow soldering and then being stabilized at +20 ℃, capacitors shall meet the following limits. (1) Capacitance change: within ±10% of the initial value. (2) Dissipation factor: within the initial limit. (3) Leakage current: within the initial limit.																																			
Shelf Life	After storage for 1000 hours at +105 ℃ ± 2℃ with no voltage applied and then being stabilized at + 20 ℃, capacitors shall meet the limits specified in endurance.																																			
Endurance	After applying rated working voltage for 2000 hours at +105 ℃ ± 2℃, and then being stabilized at +20 ℃, capacitors shall meet the following limits. (1) Capacitance change: $\phi D \leq 6.3mm$: within ± 25% of the initial value. $\phi D \geq 8mm$: within ± 20% of the initial value. (2) Dissipation factor: $\phi D \leq 6.3mm$: less than 300% of the initial value. $\phi D \geq 8mm$: less than 200% of the initial value.																																			
Characteristics at low temp.	<table><tr><td>Rated voltage</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td><td>63</td><td>100</td></tr><tr><td>Z (-25℃)/ Z (+20℃)</td><td>4</td><td>4</td><td>3</td><td>2</td><td>2</td><td>2</td><td>2</td><td>3</td></tr><tr><td>Z (-55℃)/ Z (+20℃)</td><td>12</td><td>8</td><td>6</td><td>4</td><td>3</td><td>3</td><td>3</td><td>4</td></tr></table>									Rated voltage	6.3	10	16	25	35	50	63	100	Z (-25℃)/ Z (+20℃)	4	4	3	2	2	2	2	3	Z (-55℃)/ Z (+20℃)	12	8	6	4	3	3	3	4
Rated voltage	6.3	10	16	25	35	50	63	100																												
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	Impedance ratio at 120Hz																																			
Frequency Correction factor for ripple current	<table><tr><td>Frequency</td><td>50Hz</td><td>120Hz</td><td>1kHz</td><td>10kHz</td></tr><tr><td>C ≤1000 μF</td><td>0.7</td><td>1.0</td><td>1.2</td><td>1.3</td></tr><tr><td>C >1000 μF</td><td>0.8</td><td>1.0</td><td>1.1</td><td>1.2</td></tr></table>									Frequency	50Hz	120Hz	1kHz	10kHz	C ≤1000 μF	0.7	1.0	1.2	1.3	C >1000 μF	0.8	1.0	1.1	1.2												
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All products, product specifications and data are subject to change without notice to improve reliability, function or design or otherwise.

Lumimax Part #	Capacitance	Tolerance	Voltage - Rated	Ripple Current @ Low Frequency.	Size / Dimension (D)
AEC-SMD-0.47UF-50V	0.47 μ F	$\pm 20\%$	50V	8 mA @ 120 Hz	0.157" Dia (4.00mm)
AEC-SMD-1UF-50V	1 μ F	$\pm 20\%$	50V	8 mA @ 120 Hz	0.157" Dia (4.00mm)
AEC-SMD-2.2UF50V	2.2 μ F	$\pm 20\%$	50V	12 mA @ 120 Hz	0.157" Dia (4.00mm)
AEC-SMD-4.7UF-50V	4.7 μ F	$\pm 20\%$	50V	14 mA @ 120 Hz	0.157" Dia (4.00mm)
AEC-SMD-10UF-50V	10 μ F	$\pm 20\%$	50V	32 mA @ 120 Hz	0.248" Dia (6.30mm)
AEC-SMD-22UF-50V	22 μ F	$\pm 20\%$	50V	38 mA @ 120 Hz	0.248" Dia (6.30mm)
AEC-SMD-47UF-50V	47 μ F	$\pm 20\%$	50V	60 mA @ 120 Hz	0.248" Dia (6.30mm)
AEC-SMD-100UF-35V	100 μ F	$\pm 20\%$	35V	85 mA @ 120 Hz	0.248" Dia (6.30mm)
AEC-SMD-220UF-25V	220 μ F	$\pm 20\%$	25V	180 mA @ 120 Hz	0.248" Dia (6.30mm)
AEC-SMD-470UF-25V	470 μ F	$\pm 20\%$	25V	280 mA @ 120 Hz	0.315" Dia (8.00mm)
AEC-SMD-1000UF-25V	1000 μ F	$\pm 20\%$	35V	580 mA @ 120 Hz	0.394" Dia (10.00mm)

Lumimax Part #	Height (L) - Seated (Max)	Surface Mount Land Size (A x B)
AEC-SMD-0.47UF-50V	0.212" (5.40mm)	0.169" L x 0.169" W (4.30mm x 4.30mm)
AEC-SMD-1UF-50V	0.212" (5.40mm)	0.169" L x 0.169" W (4.30mm x 4.30mm)
AEC-SMD-2.2UF50V	0.212" (5.40mm)	0.169" L x 0.169" W (4.30mm x 4.30mm)
AEC-SMD-4.7UF-50V	0.212" (5.40mm)	0.169" L x 0.169" W (4.30mm x 4.30mm)
AEC-SMD-10UF-50V	0.212" (5.40mm)	0.260" L x 0.260" W (6.60mm x 6.60mm)
AEC-SMD-22UF-50V	0.212" (5.40mm)	0.260" L x 0.260" W (6.60mm x 6.60mm)
AEC-SMD-47UF-50V	0.303" (7.70mm)	0.260" L x 0.260" W (6.60mm x 6.60mm)
AEC-SMD-100UF-35V	0.303" (7.70mm)	0.260" L x 0.260" W (6.60mm x 6.60mm)
AEC-SMD-220UF-25V	0.303" (7.70mm)	0.260" L x 0.260" W (6.60mm x 6.60mm)
AEC-SMD-470UF-25V	0.402" (10.20mm)	0.327" L x 0.327" W (8.30mm x 8.30mm)
AEC-SMD-1000UF-25V	0.413" (10.5mm)	0.406" L x 0.406" W (10.30mm x 10.30mm)

MARKING



DIMENSIONS

