VG series

SMD type, has super low ESR and large ripple current.
Lead free-reflow is supported.

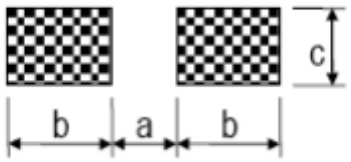
VG是表面貼裝型產品，可適應無鉛回流焊。

Specifications

Items	Characteristics	
Operating Temp. Range	-55℃~+105℃	
Capacitance Range	22~3300μF	
Capacitance Tolerance	M：±20%	
Rated Voltage Range	2.5V~25V DC	
Dissipation Factor (at 120Hz,20℃)	Not to exceed the value specified	
Leakage Current	≤0.2CV (μA, after 2 minutes)	
ESR(100K~300KHz)	Not to exceed the value specified	
Endurance 105℃, 2000h, at rated voltage	Capacitance	Within±20% of the value before test
	Leakage current	Not to exceed the value specified
	ESR	Not to exceed 150% of the value specified
	Dissipation Factor	Not to exceed 150% of the value specified
Moisture Resistance Stored at 60℃, Rh90~95%, 2000h	Capacitance	Within±20% of the value before test
	Leakage Current	Not to exceed the value specified
	ESR	Not to exceed 150% of the value specified
	Dissipation Factor	Not to exceed 150% of the value specified

Dimensions

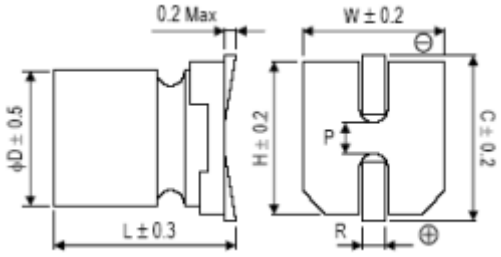
Unit: mm



ΦD×L	a	b	c
6.3×10	2.1	3.5	1.6
8×10	2.8	4.2	1.9
10×10	4.3	4.4	1.9

Recommended land pattern

Unit: mm



ΦD×L	W	H	C	R	P
6.3×10	6.5	6.5	7.2	0.5 to 0.8	2.1
8×10	8.3	8.3	9.0	0.8 to 1.1	3.2
10×10	10.3	10.3	11.0	0.8 to 1.1	4.6

Size List

RV/v(SV) / CAP/μF	2.5 (2.8)	4 (4.6)	6.3 (7.2)	10 (11.5)	16 (18.4)
68					6.3×10
82					6.3×10
100					6.3×10
180					8×10
220			6.3×10		8×10
270			6.3×10		10×10
330			6.3×10	8×10	10×10
390			8×10	8×10	10×10
470			8×10	8×10	10×10
560	8×10	8×10	8×10	8×10	
680	8×10	8×10	10×10	10×10	
820	8×10	8×10	10×10	10×10	
1000	8×10	8×10	10×10		
1200	8×10	10×10	10×10		
1500	10×10	10×10			
2000	10×10	10×10			
2500	10×10				

Characteristics List

W.V. (V)	Capacitance (μF)	L.C. (μA,2min)	tgδ (120Hz,20℃)	ESR (mΩ,100kHz)	Rated Ripple Current(mA,r.m.s)	Size ΦD×L (mm)	Part Number
2.5	560	280	0.08	11	4800	8×10	VG561M2R5F100
	680	340	0.08	11	4800	8×10	VG681M2R5F100
	820	410	0.08	11	4800	8×10	VG821M2R5F100
	1000	500	0.08	11	4800	8×10	VG102M2R5F100
	1200	600	0.08	11	4800	8×10	VG122M2R5F100
	1500	750	0.10	11	5100	10×10	VG152M2R5G100
	2000	1000	0.10	11	5100	10×10	VG202M2R5G100
	2500	1250	0.10	11	5100	10×10	VG252M2R5G100
4	560	448	0.08	11	4800	8×10	VG561M004F100
	680	544	0.08	11	4800	8×10	VG681M004F100
	820	656	0.08	11	4800	8×10	VG821M004F100
	1000	800	0.10	11	4800	8×10	VG102M004F100
	1200	960	0.10	11	5100	10×10	VG122M004G100
	1500	1200	0.10	11	5100	10×10	VG152M004G100
	2000	1600	0.10	11	5100	10×10	VG202M004G100
6.3	220	300	0.08	12	4100	6.3×10	VG221M6R3E100
	270	340.2	0.08	12	4100	6.3×10	VG271M6R3E100
	330	415.8	0.08	12	4100	6.3×10	VG331M6R3E100
	390	491.4	0.08	11	4800	8×10	VG391M6R3F100
	470	592.2	0.08	11	4800	8×10	VG471M6R3F100
	560	705.6	0.08	11	4800	8×10	VG561M6R3F100
	680	856.8	0.10	11	5100	10×10	VG681M6R3G100
	820	1033.2	0.10	11	5100	10×10	VG821M6R3G100
	1000	1260	0.10	11	5100	10×10	VG102M6R3G100
	1200	1512	0.10	11	5100	10×10	VG122M6R3G100
10	330	660	0.08	11	4800	8×10	VG331M010F100
	390	780	0.08	11	4800	8×10	VG391M010F100
	470	940	0.08	11	4800	8×10	VG471M010F100
	560	1120	0.08	11	4800	10×10	VG561M010G100
	680	1360	0.10	11	4800	10×10	VG681M010G100
	820	1640	0.10	11	5100	10×10	VG821M010G100
16	68	300	0.10	15	3100	6.3×10	VG680M016E100
	82	300	0.10	15	3100	6.3×10	VG820M016E100
	100	320	0.10	15	3100	6.3×10	VG101M016E100
	180	576	0.10	11	4800	8×10	VG181M016F100
	220	704	0.10	11	4800	8×10	VG221M016F100
	270	864	0.10	11	5100	10×10	VG271M016G100
	330	1056	0.10	11	5100	10×10	VG331M016G100
	390	1248	0.10	11	5100	10×10	VG391M016G100
	470	1504	0.10	11	5100	10×10	VG471M016G100

Frequency Coefficient for Ripple Current

Frequency	120Hz≤freq.<1KHz	1KHz≤freq.<10KHz	10KHz≤freq.<100KHz	100KHz≤freq.<300KHz
Coefficient	0.05	0.3	0.7	1