UGV Series

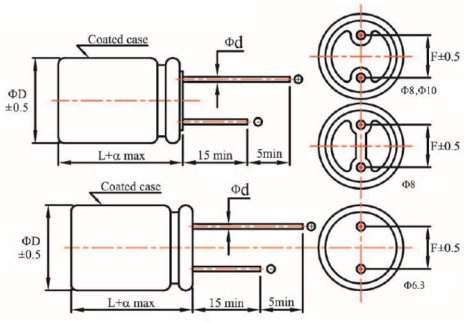
- **Low ESR at a high frequency ranged**
- **High ripple current capability**
- **2,000 hours at 105℃**

◆ SPECIFICATIONS

Item	Performance Characteristics
Category Temperature Range	-55 ~ +105℃
Working Voltage Range	20 ~ 100Vdc
Surge Voltage	Rated Voltage ×1.15
Capacitance Tolerance	M: ±20% (at 25℃ and 120Hz)
ESR	See the standard ratings table (at 25℃, 100~300KHz)
Dissipation Factor (Tanδ)	See the standard ratings table (at 25℃, 120Hz)
Leakage Current ※1	See the standard ratings table (Impress the rated voltage for 2 minutes)
Low Temperature Characteristics Impedance Ratio	Z(-25℃)/Z(+25℃) ≤1.15 at 100KHz Z(-55℃)/Z(+25℃) ≤1.25 at 100KHz
Endurance	The following specifications shall be satisfied when the capacitors are restored to 25℃ after subjected to DC voltage for 2,000 hours at 105℃. Capacitance change: ≦ ±20% of the initial value ESR: ≦ 150% of the specified value Dissipation factor(tanδ): ≦ 150% of the specified value Leakage current: ≦ specified value
Damp Heat (Steady State)	The following requirements shall be satisfied when the capacitor are restored to 25℃ after exposing them for 1,000 hours at 60℃ 90 to 95% RH. Capacitance change: ≦ ±20% of the initial value ESR: ≦ 150% of the specified value Dissipation factor(tanδ): ≦ 150% of the specified value Leakage current: ≦ specified value
Others	Conforms to JIS-C-5101-26 (2012)

※1 In case of some problems for measured values, measure after applying rated voltage for 120 minutes at105℃.
※2 ESR should be measured at both of the terminal ends closest to the capacitor body.

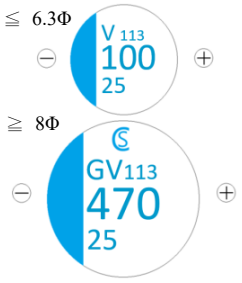
◆ DIMENSIONS (mm)



◆ LEAD

ΦD	6.3	6.3	6.3	8	8	10
Φd	0.45	0.6	0.6	0.6	0.6	0.6
L	5	8	11	8	11~12	7~13
α	1	1	1.5	1	1.5	1.5
F	2.5	2.5	2.5	3.5	3.5	5.0

◆ MARKING



◆ PART NUMBER SYSTEM (Example : 25V 100μF)

U	G	V	1	E	1	0	1	M	N	N	6	3	0	8						

- Special Request
- Size code(6308 : 6.3×8)
- Terminal length code
- Lead forming Type code
- Capacitance tolerance code(M:±20%)
- Capacitance code(100μF)
- Voltage code(25V)
- Series code (UGV)

UGV Series

◆ **STANDARD RATINGS**

WV (Vdc)	Cap (μF)	Case Size (mm) ΦD×L	ESR 100~300KHz (mΩmax)	Rated Ripple current (mArms/ 105℃, 100KHz)	Tanδ max	Leakage Current (μA max)	Part Number
20 (1D)	820	10×12	16	4650	0.12	3280	UGV1D821MNN1012U
25 (1E)	47	6.3×5	30	2600	0.12	300	UGV1E470MNN6305
	56	6.3×5	30	2800	0.12	500	UGV1E560MNN6305
	100	6.3×8	28	2700	0.12	500	UGV1E101MNN6308
	150	6.3×8	18	3200	0.12	750	UGV1E151MNN6308
	180	8×8	18	4100	0.12	900	UGV1E181MNN0808U
	180	8×11	16	4650	0.12	900	UGV1E181MNN0811U
	220	6.3×11	30	2600	0.12	1100	UGV1E221MNN6311
	220	8×8	18	4100	0.12	1100	UGV1E221MNN0808U
	220	8×11	16	4650	0.12	1100	UGV1E221MNN0811U
	220	10×7	25	2800	0.12	1100	UGV1E221MNN1007U
	270	10×12	16	5000	0.12	1350	UGV1E271MNN1012U
	330	8×11	16	4650	0.12	1650	UGV1E331MNN0811U
	330	10×12	14	5000	0.12	1650	UGV1E331MNN1012U
	390	10×12	14	5000	0.12	1950	UGV1E391MNN1012U
	470	8×11	16	4650	0.12	2350	UGV1E471MNN0811U
	470	10×12	14	5000	0.12	2350	UGV1E471MNN1012U
	560	10×12	20	3100	0.12	2800	UGV1E561MNN1012U
	680	10×12	18	5000	0.12	3400	UGV1E681MNN1012RU
	680	10×12	16	5000	0.12	1700	UGV1E681MNN1012ELRU
35 (1V)	18	8×11	34	2100	0.12	300	UGV1V180MNN0811U
	39	8×11	30	2100	0.12	300	UGV1V390MNN0811U
	47	6.3×8	40	2400	0.12	329	UGV1V470MNN6308
	47	8×11	30	2100	0.12	329	UGV1V470MNN0811U
	82	8×11	27	2300	0.12	574	UGV1V820MNN0811U
	100	8×11	27	2300	0.12	700	UGV1V101MNN0811U
	100	10×12	26	2700	0.12	700	UGV1V101MNN1012U
	120	10×12	26	2700	0.12	840	UGV1V121MNN1012U
	150	10×12	26	2700	0.12	1050	UGV1V151MNN1012U
	220	10×12	26	2700	0.12	1540	UGV1V221MNN1012U
50 (1H)	27	8×11	33	2000	0.12	300	UGV1H270MNN0811U
	39	8×11	29	2200	0.12	390	UGV1H390MNN0811U
	47	10×7	45	1900	0.12	470	UGV1H470MNN1007U
	47	10×12	29	2500	0.12	470	UGV1H470MNN1012U
	68	10×12	28	2600	0.12	680	UGV1H680MNN1012U
63 (1J)	22	8×8	45	2100	0.12	300	UGV1J220MNN0808U
	47	10×12	29	2600	0.12	592	UGV1J470MNN1012U
	68	10×12	29	2600	0.12	857	UGV1J680MNN1012U
100 (2A)	18	8×11	40	1850	0.12	360	UGV2A180MNN0811U
	47	10×12	38	2100	0.12	940	UGV2A470MNN1012U