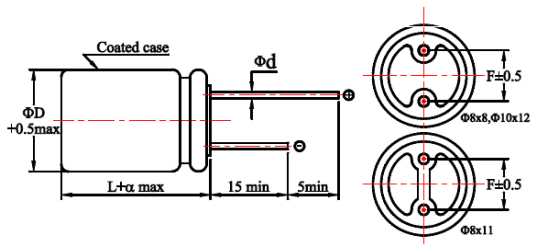
BRA Series

- **Low ESR at a high frequency range**
- **High ripple current capability**
- **Load life 4,000 hours at 125℃**

◆ SPECIFICATIONS

Item	Performance Characteristics
Category Temperature Range	-55 ~ +125℃
Working Voltage Range	35 ~ 80Vdc
Surge Voltage	Rated Voltage ×1.15
Capacitance Range	33 ~ 270 μF
Capacitance Tolerance	±20% (at 25℃ and 120Hz)
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(+20℃) ≤1.5 at 100KHz Z(-55℃)/Z(+20℃) ≤2.0 at 100KHz
Endurance	The following specifications shall be satisfied when the capacitors are restored to 25℃ after subjected to DC voltage with the rated ripple current is applied for 4,000 hours at 125℃. Capacitance change: ≦ ±30% of the initial value Dissipation factor(tanδ): ≦ 200% of the specified value ESR: ≦ 200% 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 85℃ 85% RH. Capacitance change: ≦ ±30% of the initial value Dissipation factor(tanδ): ≦ 200% of the specified value Leakage current: ≦ specified value
Other	Conforms to JIS-C-5101-4-1 (1998)

◆ DIMENSIONS (mm)



◆ LEAD

Code	ΦD	Φd	L	α	F
0809	8	0.6	9.0	1.5	3.5
1010	10	0.6	10.0	1.5	5.0

◆ MARKING

◆ PART NUMBER SYSTEM (Example : 50V 68μF)

B	R	A	1	H	6	8	0	M	N	N	0	8	0	9						

- Special Request
- Size code(0809 : 8×9)
- Terminal length code
- Lead forming Type code
- Capacitance tolerance code(M:±20%)
- Capacitance code(68μF)
- Voltage code(50V)
- Series code (BRA)

BRA Series

◆ **STANDARD RATINGS**

WV (Vdc)	Cap (μF)	Case Size (mm) ΦD×L	ESR 100~300KHz (mΩmax)	Rated Ripple current (mArms/ 125℃, 100KHz)	Tanδ max	Leakage Current (μA max)	Part Number
35 (1V)	150	8×9	27	1600	0.12	52.5	BRA1V151MNN0809U
	270	10×10	20	2000	0.12	94.5	BRA1V271MNN1010U
50 (1H)	68	8×9	30	1250	0.10	34	BRA1H680MNN0809U
	100	10×10	28	1600	0.10	50	BRA1H101MNN1010U
63 (1J)	33	8×9	40	1100	0.08	20.8	BRA1J330MNN0809U
	56	10×10	30	1400	0.08	35.3	BRA1J560MNN1010U
80(1K)	47	10×10	36	1360	0.08	37.6	BRA1K470MNN1010U