

承认书

APPROVAL SHEET

客户 CUSTOMER	立创商城
客户料号 CUSTOMER P/N	
规格描述 DESCRIPTION	400V/40UF/K/F27.5/直腳/L16/32*37*22/ZNRC/灰殼
产品编码 PART NUMBER	CFM2G406KL1E3237R200
日期 DATE	2026-06-10

德尔创承认栏 APPROVED BY DERSONIC			客户承认栏 APPROVED BY CUSTOMER	
批 准 APPROVED BY	审 核 CHECK BY	制订 FORMULATE BY	批 准 APPROVED BY	审 核 CHECK BY
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PRODUCT DIMENSIONS

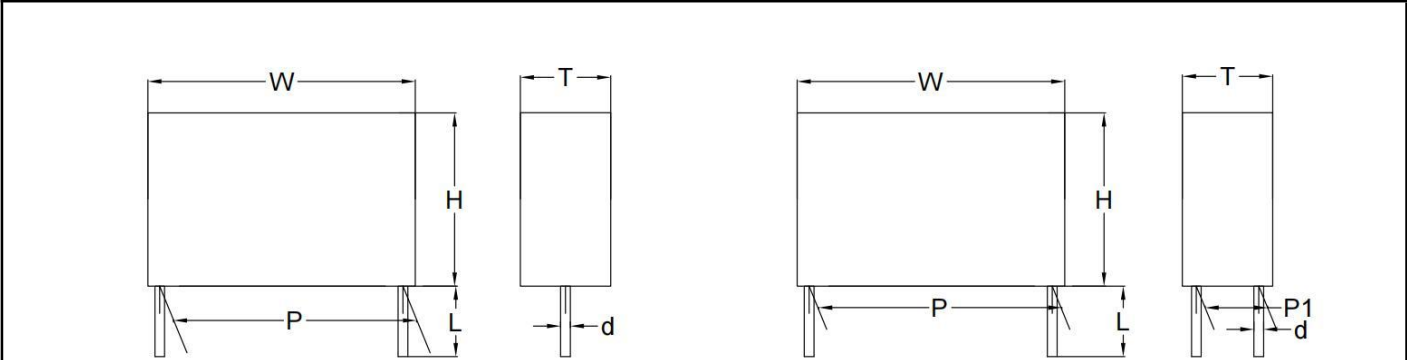


Fig.1

Fig.2

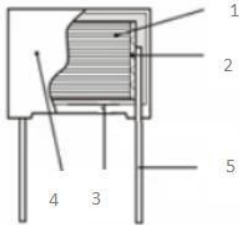
P/N	CAP.(uF)	Symbol	Tol. ±%	R.V. (DC) 70℃ U _{OP}	R.V. (DC) 85℃ U _n	Dimensions in mm							dv/dt (V/us)	IPEAK (A)	10KHz ESR (mΩ)	70℃ 10KHz I _{rms} (A)	Fig.	Notes
						W ±0.5	H ±0.5	T ±0.5	P ±0.5	P1 ±0.5	φd ±0.05	L Min						
CFM2G406KL1E3237R200	40.0	406	10	400	300	32.0	37.0	22.0	27.5	NA	0.8	15.0	11	440	5.4	10.0	1	

* Electrical data shall be subject to actual measurement

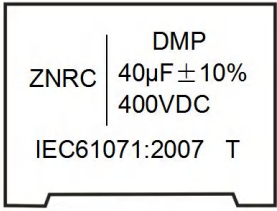
GENERAL TECHNICAL DATA

APPLICATIONS	DC Link / DC Filtering
DIELECTRIC	Metallized Polypropylene Film
REFERENCE STANDARD	IEC 61071/EN 61071
CLIMATIC CATEGORY	40/105/56 IEC 60068- 1
OPERATING TEMPERATURE RANGE	-40°C ~ +105°C (85°C ~105°C, decreasing factor 1.25% per °C for Rated Voltage)
PROTECTION	Solvent resistant plastic case UL94V-0 Thermosetting resin sealing UL 94V-0 compliant
INSTALLATION	Any position.
PACKAGING	Packed in cardboard boxes with protection for the terminals.
STORAGE CONDITIONS	Storage time: ≤24 months from the date marked on the label package. Average relative humidity per year ≤70% RH≤85% for 30 days randomly distributed throughout the year. Dew is absent: Temperature: -40°C ~ +85°C
STORAGE LIFE	Product that passed less than 2 years from production, No need reconfirmation.
ROHS COMPLIANCE	Compliant with the restricted substance requirement of Directive 2011/65/EU.
FLAME RETARDANT GRADE	Flame retardant performance accords with horizontal combustion grade HB and vertical combustion grade V-0.
APPLICATION NOTE AND LIMITING CONDITIONS	These capacitors are designed only for DC voltage so should not be used for AC line. The continuous peak voltage shall not exceed the rated DC voltage rating.

CONSTRUCTION

1	DIELECTRIC	Metallized Polypropylene Film & Mono Structure	
2	METAL SPRAY	Sn/Zn Alloy	
3	FILLING	Epoxy Resin (UL 94V-0)	
4	CASE	Plastic Case (UL 94V-0)	
5	LEAD WIRE	Tinned Copper Wire	

MARKING

MANUFACTURER'S SYMBOL	"ZNRC" stands for "DONGGUAN DERSONIC ELECTRONIC CO., LTD."	EXAMPLE
TYPE OR SERIES	DMP	
NOMINAL CAPACITANCE	Capacitance in µF	
CAPACITANCE TOLERANCE	J (±5%), K (±10%), M (±20%)	
RATED VOLTAGE (at 70°C)	Un	
STANDARD	IEC61071:2007	
DATE CODE	T	

ELECTRICAL CHARACTERISTICS

VOLTAGE RANGE	450Vdc ~ 1200Vdc
CAPACITANCE RANGE	1.0μF ~ 200μF
CAPACITANCE TOLERANCE	±5% or ±10% or ±20% at +25°C
CAPACITANCE	Measuring Frequency at 1 kHz Measuring Voltage: 1±0.2V
STANDARD ATMOSPHERIC CONDITIONS FOR STATIC TEST	AMBIENT TEMPERATURE: 15°C to 35°C (If there is any doubt on the results, the measurements shall be made at +20 +/- 5°C) RELATIVE HUMIDITY: 45% to 75% (If there is any doubt on the results, the measurements shall be made at 60% to 70 %.) AIR PRESSURE: 86 kPa to 106 kPa.
VOLTAGE BETWEEN TERMINALS U_{TT}	1.5* U_n VDC for 10 seconds (between terminations) @ +25°C ±5°C
VOLTAGE BETWEEN TERMINALS AND CASE U_{TC}	3000VAC, 50/60Hz 60s (at +25 +/-5°C)
DIELECTRIC DISSIPATION FACTOR $Tg\delta_0$	$\leq 2 \times 10^{-4}$
DISSIPATION FACTOR	≤ 0.002 (0.2%) at 1KHz; C $\leq 20\mu F$ at 25°C ≤ 0.003 (0.3%) at 1KHz; C $> 20\mu F$ at 25°C ≤ 0.004 (0.4%) at 1KHz; C $> 80\mu F$ at 25°C
INSULATION RESISTANCE	RC between leads, IR $\times C \geq 30,000$ s at 100vdc 1 minute at +25°C
SELF- INDUCTANCE	<1nH per mm of lead spacing
HOT-SPOT	$\leq 85^\circ C$
LIFE EXPECTANCY	100,000 hours at U_{OP} at hot spot temperature $T_{HS} = +70^\circ C$ 100,000 hours at U_n at hot spot temperature $T_{HS} = +85^\circ C$ 10,000 hours at U_{OP} at hot spot temperature $T_{HS} = +105^\circ C$ 500 hours at $0.7 \times U_{n85}$ at hot spot temperature $T_{HS} = +115^\circ C$ 200 hours at $0.6 \times U_{n85}$ at hot spot temperature $T_{HS} = +125^\circ C$
FAILURE RATE	100 Fit
MAX. ALTITUDE	2000 m
OVERVOLTAGE Apply 110% of rated voltage Apply 115% of rated voltage Apply 120% of rated voltage Apply 130% of rated voltage	Maximum duration within one day 30% of on-load duration 30 mins 5 mins 1 min

ENVIRONMENTAL TEST

SOLDERABILITY	TEST CONDITIONS: Testing Method Per IEC 60068-2-20 Ta Soldering Temperature: $+245 \pm 5^{\circ}\text{C}$ Immersion Duration: 2 ± 0.5 seconds PERFORMANCE: More than 95% of circumferential surface of lead wire shall be covered with new solder.
SOLDERING HEAT RESISTANCE	TEST CONDITIONS: Flow Soldering: Preheat Temperature $100^{\circ}\text{C} \sim 120^{\circ}\text{C}$ Preheat Duration: 120 seconds Max. Soldering Temperature: $+260 \pm 5^{\circ}\text{C}$ Immersion Duration: ≤ 10 seconds Immersion Depth: 1.5 ± 0.5 mm from roots. Iron Soldering: Soldering Temperature: $+400^{\circ}\text{C}$ Immersion Duration: ≤ 3 seconds After test, allow it stay alone for 1.5 ± 0.5 hours at standard temperature and humidity before making measurements. PERFORMANCE: Capacitance Change Rate ($\Delta C/C$): $\leq \pm 2\%$ DF change ($\Delta \text{tg}\delta$): $\leq 50 \times 10^{-4}$ at 1 KHz. Insulation Resistance: $\geq 50\%$ of initial limit
HUMIDITY RESISTANCE	TEST CONDITIONS: Testing method per IEC 60068-2-3 Ca Test Temperature: $+40 \pm 2^{\circ}\text{C}$ Test Humidity: 90% to 95% R.H. Test Duration: $1344 \pm 24/-0$ hours PERFORMANCE: Capacitance Change Rate ($\Delta C/C$): $\leq \pm 5\%$ DF change ($\Delta \text{tg}\delta$): $\leq 50 \times 10^{-4}$ at 1 KHz. Insulation Resistance: $\geq 50\%$ of initial limit
COLD RESISTANCE	TEST CONDITIONS: Test Temperature: $-40 \pm 2^{\circ}\text{C}$ Test Duration: $2 \pm 1/-0$ hours PERFORMANCE: Capacitance Change Rate ($\Delta C/C$): $\leq \pm 3\%$ DF change ($\Delta \text{tg}\delta$): $\leq 50 \times 10^{-4}$ at 1 KHz Insulation Resistance: $\geq 50\%$ of initial limit
DRY HEAT RESISTANCE	TEST CONDITIONS: Test Temperature: $+105 \pm 2^{\circ}\text{C}$ Test Duration: $16 \pm 1/-0$ hours PERFORMANCE: Capacitance Change Rate ($\Delta C/C$): $\leq \pm 3\%$ DF change ($\Delta \text{tg}\delta$): $\leq 50 \times 10^{-4}$ at 1 KHz. Insulation Resistance: $\geq 50\%$ of initial limit

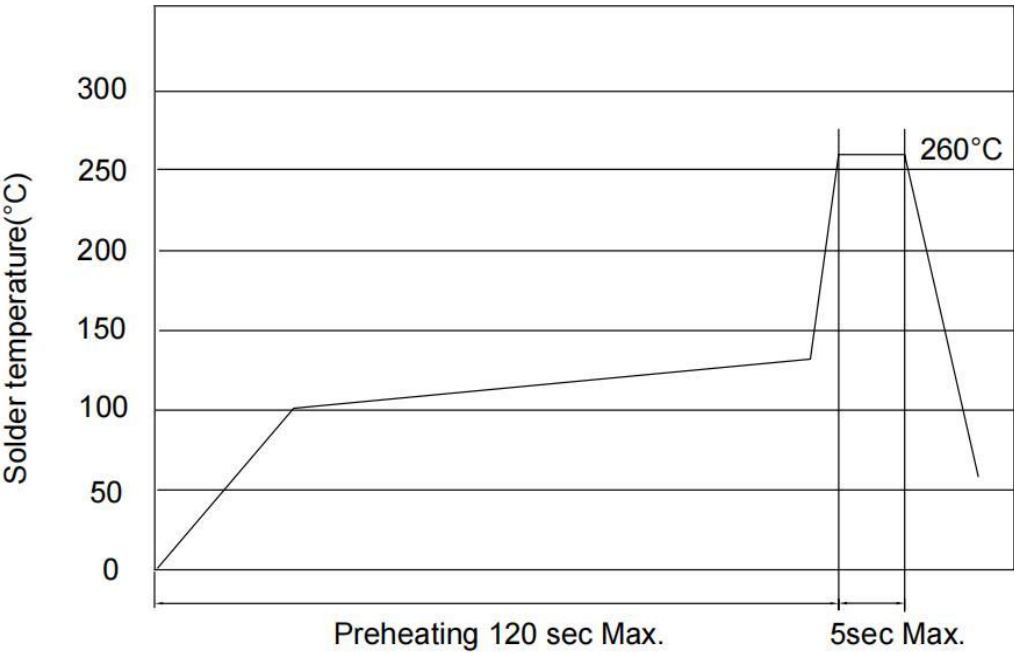
ENVIRONMENTAL TEST

RAPID TEMPERATURE CHANGE	TEST CONDITIONS: Testing method per IEC 68-2-14 Na. Test Temperature Cycle: Total 5 cycles High Temperature: $+105 \pm 5^{\circ}\text{C}$ Low Temperature: $-40 \pm 5^{\circ}\text{C}$ 30 min $\pm 10\%$ for each temperature PERFORMANCE: Capacitance Change Rate ($\Delta C/C$): $\leq \pm 5\%$ DF change ($\Delta \text{tg}\delta$): $\leq 50 \times 10^{-4}$ at 1 KHz Insulation Resistance: $\geq 50\%$ of initial limit
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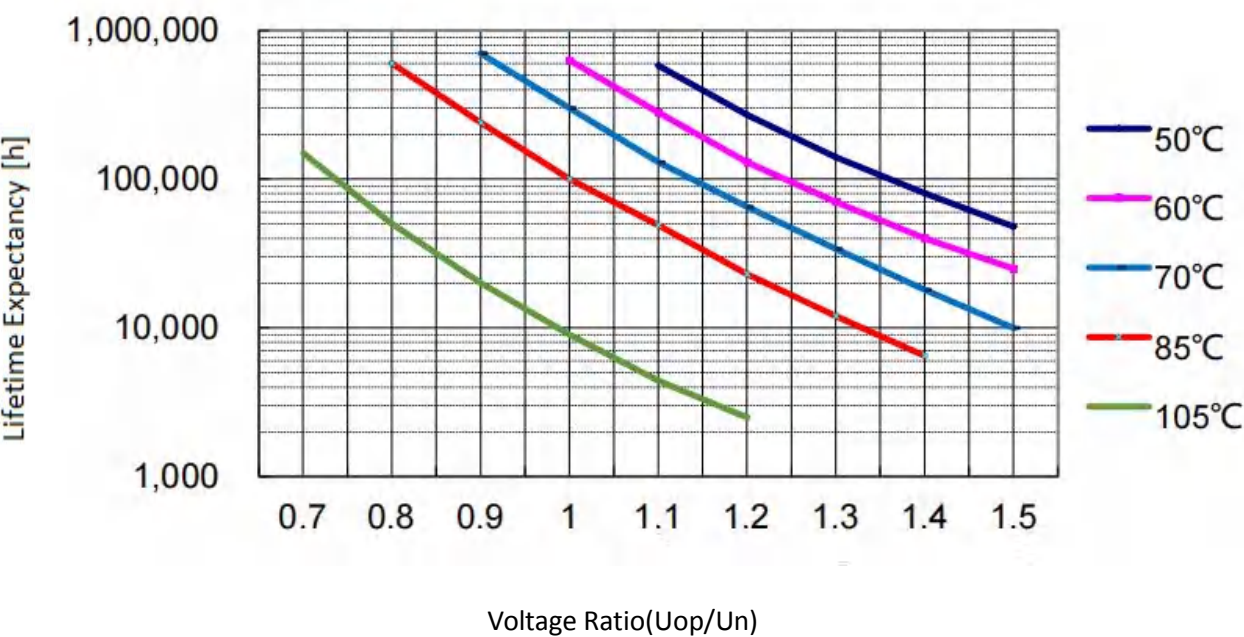
BUMP	TEST CONDITIONS: Pulse shape: half sine Acceleration: 490 m/s² Duration of pulse: 11 ms PERFORMANCE: No visible damage Capacitance Change Rate ($\Delta C/C$): $\leq \pm 2\%$ DF change ($\Delta tg\delta$): $\leq 50 \times 10^{-4}$ at 1 KHz Insulation Resistance: $\geq 50\%$ of initial limit
HIGH TEMPERATURE LOADING	TEST CONDITIONS: Testing method per IEC 61071 Test Temperature: $+85 \pm 2^{\circ}\text{C}$. Apply 130% of rated voltage for 1,000 +24/-0 hours. Duration: 500 hours 1000 charges and discharges At 1.3 * I peak (maximum respective peak current in continuous operation) PERFORMANCE: Capacitance Change Rate ($\Delta C/C$): $\leq \pm 5\%$ DF change ($\Delta tg\delta$): $\leq 50 \times 10^{-4}$ at 1 KHz. Insulation Resistance: $\geq 50\%$ of initial limit

SOLDERING PROCESS CONT.

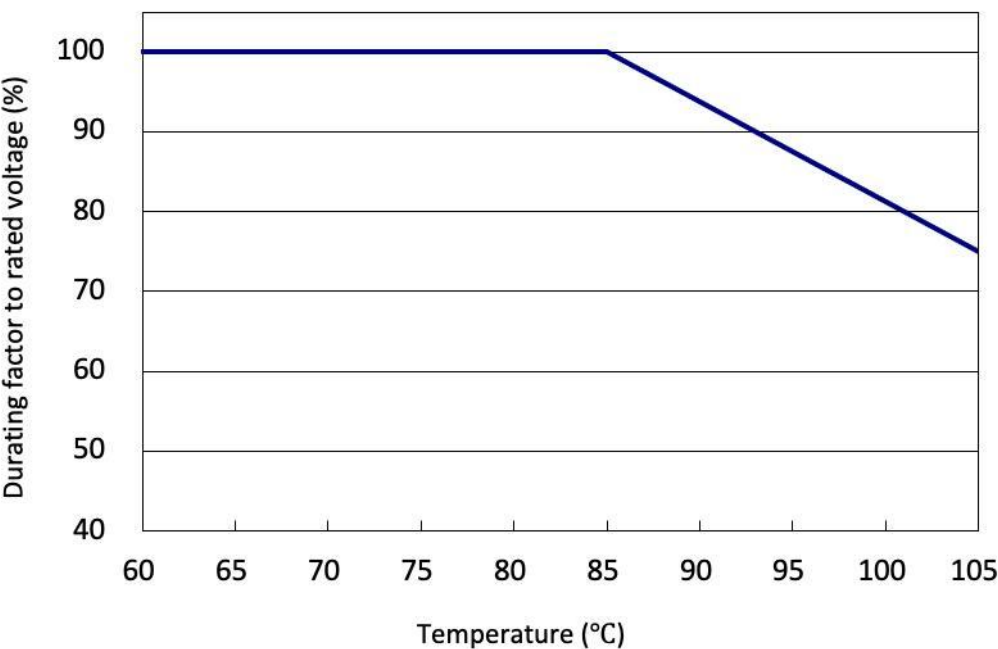
SOLDERING	When soldering a capacitor ,heat in soldering is conducted to the elemants of the capacitor from lead wire and an enclosure,and hence it should be noted that soldering under high temperature and a long period may cause deterioration of characteristic or breakdown of capacitors.
	Wave flow soldering Heating temperature:100°C~120°C Heating time less than 60 sec Heating temperature:120°C~130°C Heating time less than 10 sec When using soldering iron Iron tip temperature less than 350°C Soldering time (sec.) within 3seconds When soldering a capacitor mounted on the board with chip-type components When applying the curing for fixing the component, the duration for which a capacitor is exposed to heat ah all be within the permissible time,which changes according to the ambient temperature of the as shown in the annex.



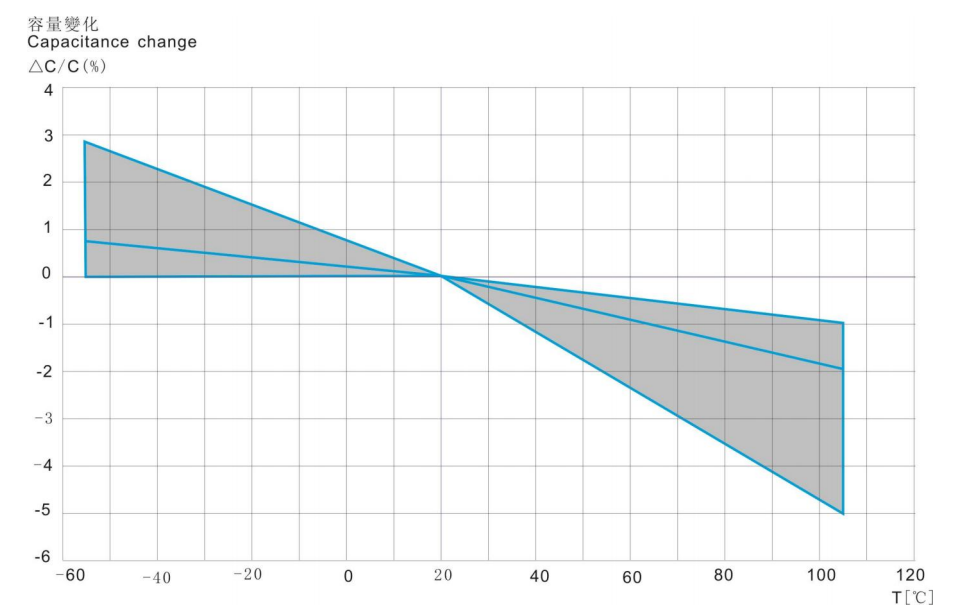
Lifetime Expectancy



Derating of Rated Voltage Vs Temperature



Capacitance Change



Insulation Resistance

