

# GXM

## 特点 Features

- 保证135°C 2000~4000小时。Endurance: 2000~4000h at 135°C.
- 额定电压范围：16V~50V。Rated Voltage Range: 16V~50V.
- 135°C高温长寿命品。135°C High Temperature & Long Life Type.
- 满足RoHS要求。RoHS Compliant.
- 满足AEC-Q200。AEC-Q200 compliant.



## 主要技术性能 Specifications

项目 Items	特性 Performance Characteristics				
类别温度范围 Category Temperature Range	-55°C ~ +135°C				
额定电压范围 Rated Voltage (U <sub>R</sub> )	16V ~ 50V				
标称电容范围 Nominal Capacitance Range(C <sub>n</sub> )	33~560μF			120Hz, +20°C	
标称电容允许偏差 Allowed Capacitance Tolerance(C <sub>T</sub> )	±20%			120Hz, +20°C	
漏电流 Leakage Current(I <sub>L</sub> )	≤0.05U <sub>R</sub> C <sub>n</sub> (μA) or 3μA, whichever is greater			+20°C After 2 minutes	
损耗角正切值 Tangent of loss angle(Tanδ)	U <sub>R</sub> (V)	16~25	35	50	Max. 120Hz, +20°C
	Tanδ	0.14	0.12	0.10	
等效串联电阻 Equivalent Series Resistance(ESR)	参照规格表 Reference parameter table			Max. 100KHz, +20°C	
低温特性 Characteristics at low Temperature	Z <sub>-25°C</sub> /Z <sub>+20°C</sub> ≤ 1.5 Z <sub>-55°C</sub> /Z <sub>+20°C</sub> ≤ 2.0			Max 100KHz	
耐久性 Load Life	+135°C施加额定电压4000小时(Φ6.3:2000小时)后,待温度恢复到20°C后进行测试,电容器应满足以下要求: The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 4000 hours at 135°C. (Φ6.3:2000hours)				
	电容变化率 Capacitance Change	±30%初始测试值以内 Within ±30% of initial measured value			
	损耗角正切 Tangent of loss angle	≤ 200%初始规定值 Not more than 200% of specified value			
	阻抗 Equivalent Series Resistance	≤ 200%初始规定值 Not more than 200% of specified value			
	漏电流 Leakage Current	≤ 初始规定值 Not more than specified value			
耐湿性负荷 Biased humidity	85°C, 85%湿度环境中,连续加载额定电压2,000小时,电容器应满足以下要求: After applying rated voltage for 2000 hours at 85°C and humidity of 85%, the capacitors shall meet the following criteria.				
	电容变化率 Capacitance Change	±30%初始测试值以内 Within ±30% of initial measured value			
	损耗角正切 Tangent of loss angle	≤ 200%初始规定值 Not more than 200% of specified value			
	阻抗 Equivalent Series Resistance	≤ 200%初始规定值 Not more than 200% of specified value			
	漏电流 Leakage Current	≤ 初始规定值 Not more than specified value			

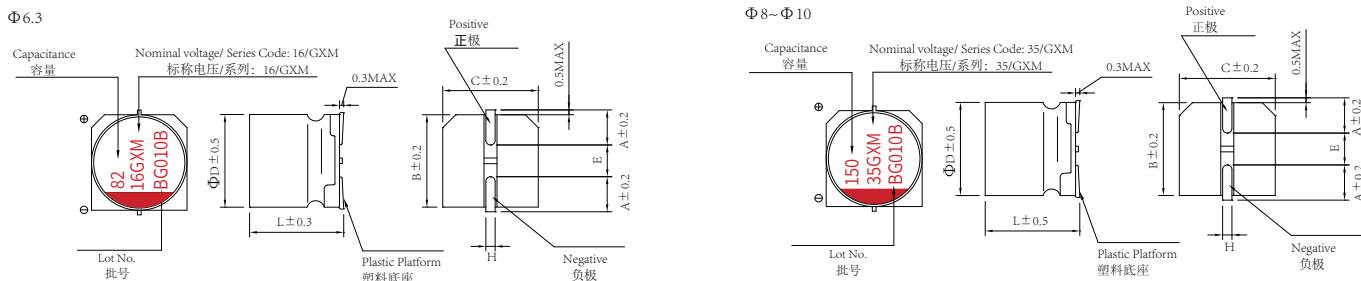
※ 当产生疑问的时候,用以下电压处理后测定。

电压处理: 125°C下,连续加载120分钟电压。加载电压为额定电压。

When in doubt, apply the following voltage treatment and measure.

Voltage processing: under the condition of 125 °C ambient temperature, continuous load voltage of 120 minutes. Load voltage is rated voltage.

尺寸图 Dimensional drawings



尺寸表 Size table

单位 Unit: mm

	Φ6.3×5.8	Φ6.3×7.7	Φ8×10.5	Φ10×10.5	Φ10×12.5
A	2.4	2.4	2.9	3.2	3.2
B	6.6	6.6	8.3	10.3	10.3
C	6.6	6.6	8.3	10.3	10.3
E	2.2	2.2	3.1	4.5	4.5
L	5.8	7.7	10.5	10.5	12.5
H	0.5~0.8			0.8~1.1	

规格特性表  
Table of specifications and characteristics

U <sub>R</sub> (V)	C <sub>R</sub> (μF)	ΦD×L (mm*mm)	Tanδ (120HZ,20°C)	I <sub>L</sub> (μA)	ESR (mΩ/at 100k~300kHz,max)		I <sub>AC,R</sub> (mA/rms at 100kHz)	
					20°C	-55°C	135°C	125°C
16	82	6.3×5.8	0.14	65.6	45		950	1700
	150	6.3×7.7	0.14	120	27		1450	2500
	270	8×10.5	0.14	216	20		1700	3050
	470	10×10.5	0.14	376	18		2100	3400
	560	10×12.5	0.14	448	15		2550	4200
25	56	6.3×5.8	0.14	70	50		900	1400
	100	6.3×7.7	0.14	125	30		1400	2100
	220	8×10.5	0.14	275	22		1600	2900
	330	10×10.5	0.14	412.5	20		2000	3300
	470	10×12.5	0.14	587.5	16		2500	4050
35	47	6.3×5.8	0.12	82.25	60		900	1400
	68	6.3×7.7	0.12	119	35		1400	2100
	150	8×10.5	0.12	262.5	22		1600	2900
	270	10×10.5	0.12	472.5	20		2000	3300
	330	10×12.5	0.12	577.5	17		2400	3950
50	33	8×10.5	0.1	82.5	30		1250	2400
	47	8×10.5	0.1	117.5	30		1250	2400
	56	10×10.5	0.1	140	25		1600	2900
	68	10×10.5	0.1	170	25		1600	2900
	100	10×10.5	0.1	250	25		1600	2900
	120	10×10.5	0.1	300	25		1600	2900
	150	10×12.5	0.1	375	19		2250	3700

额定纹波电流频率修正系数  
Frequency correction factor for ripple current

Frequency (KHz)	$0.1 \leq \text{Freq.} \leq 0.5$	$0.5 < \text{Freq.} \leq 1$	$1 < \text{Freq.} \leq 5$	$5 < \text{Freq.} \leq 10$	$10 < \text{Freq.} \leq 50$	$50 < \text{Freq.} < 100$	$100 \leq \text{Freq.} \leq 300$
Coefficient (Kf)	0.05	0.10	0.3	0.4	0.7	0.9	1