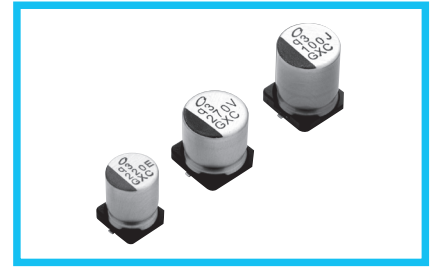
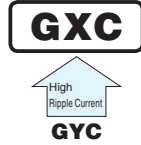


**GXC** Chip Type, 135°C High Reliability

**NEW**

- High Reliability, Low ESR, High ripple current.
- Long life of 4000 hours at 135°C.
- Compliant to the RoHS directive (2011/65/EU, (EU)2015/863).
- AEC-Q200 Qualified. Please contact us for details.

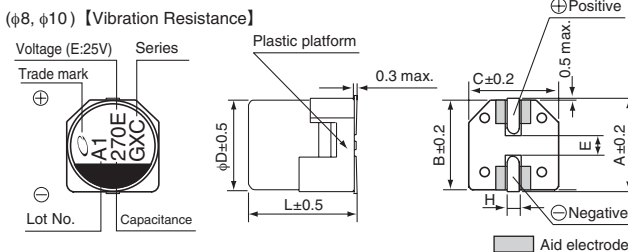
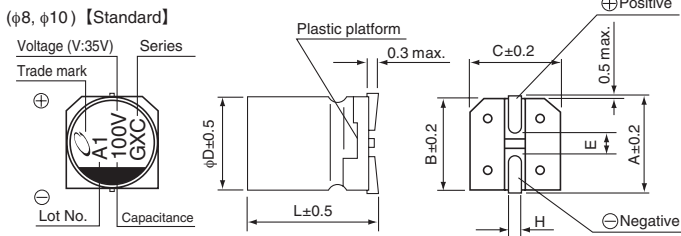


■ Specifications

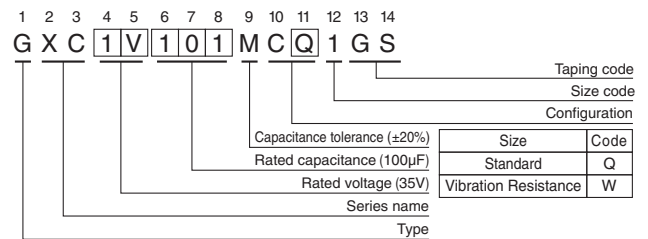
Item	Performance Characteristics									
Category Temperature Range	-55 to +135°C									
Rated Voltage Range	25 to 63V									
Rated Capacitance Range	33 to 470μF									
Capacitance Tolerance	±20% at 120Hz, 20°C									
Tangent of loss angle (tan δ)	Rated voltage (V)	25    35    50    63								
	tan δ (max.)	0.14    0.12    0.10    0.08								
ESR	Less than or equal to the specified value at 100kHz, 20°C									
Leakage Current ※	After 2 minutes' application of rated voltage at 20°C, leakage current is not more than 0.01CV(μA).									
Temperature Characteristics (Max.Impedance Ratio)	Z(-25°C) / Z(+20°C) ≤ 2 (100kHz)									
	Z(-55°C) / Z(+20°C) ≤ 2.5									
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after D.C. bias plus rated ripple current is applied for 4000 hours at 125°C or 135°C, the peak voltage shall not exceed the rated voltage.	<table border="1"> <tr> <td>Capacitance change</td> <td>Within ±30% of the initial capacitance value</td> </tr> <tr> <td>tan δ</td> <td>200% or less of the initial specified value</td> </tr> <tr> <td>ESR</td> <td>200% or less of the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>Less than or equal to the initial specified value</td> </tr> </table>	Capacitance change	Within ±30% of the initial capacitance value	tan δ	200% or less of the initial specified value	ESR	200% or less of the initial specified value	Leakage current	Less than or equal to the initial specified value
	Capacitance change	Within ±30% of the initial capacitance value								
	tan δ	200% or less of the initial specified value								
	ESR	200% or less of the initial specified value								
Leakage current	Less than or equal to the initial specified value									
Shelf Life	After storing the capacitors under no load at 135°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified values for the endurance characteristics listed above.	<table border="1"> <tr> <td>Capacitance change</td> <td>Within±30% of the initial capacitance value</td> </tr> <tr> <td>tan δ</td> <td>200% or less of the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>Less than or equal to the initial specified value</td> </tr> </table>	Capacitance change	Within±30% of the initial capacitance value	tan δ	200% or less of the initial specified value	Leakage current	Less than or equal to the initial specified value		
	Capacitance change	Within±30% of the initial capacitance value								
	tan δ	200% or less of the initial specified value								
	Leakage current	Less than or equal to the initial specified value								
Damp Heat (Steady State)	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 2000 hours at 85°C, 85% RH.	<table border="1"> <tr> <td>Capacitance change</td> <td>Within±30% of the initial capacitance value</td> </tr> <tr> <td>tan δ</td> <td>200% or less of the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>Less than or equal to the initial specified value</td> </tr> </table>	Capacitance change	Within±30% of the initial capacitance value	tan δ	200% or less of the initial specified value	Leakage current	Less than or equal to the initial specified value		
	Capacitance change	Within±30% of the initial capacitance value								
	tan δ	200% or less of the initial specified value								
	Leakage current	Less than or equal to the initial specified value								
Resistance to Soldering Heat	The capacitors are kept on a hot plate for 30 seconds, which is maintained at 250°C. The capacitors shall meet the characteristic requirements listed at right when they are removed from the plate and restored to 20°C.	<table border="1"> <tr> <td>Capacitance change</td> <td>Within±10% of the initial capacitance value</td> </tr> <tr> <td>tan δ</td> <td>Less than or equal to the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>Less than or equal to the initial specified value</td> </tr> </table>	Capacitance change	Within±10% of the initial capacitance value	tan δ	Less than or equal to the initial specified value	Leakage current	Less than or equal to the initial specified value		
	Capacitance change	Within±10% of the initial capacitance value								
	tan δ	Less than or equal to the initial specified value								
	Leakage current	Less than or equal to the initial specified value								
Marking	Black print on the case top.									

※ I : Leakage Current (μA), C : Rated Capacitance (μF), V : Rated Voltage (V)

■ Dimensions



Type numbering system (Example : 35V 100μF)



Voltage	Standard			Vibration Resistance		
	8x10	10x10	10x12.5	8x10	10x10	10x12.5
V 25 35 50 63	A	B	C	E	L	H
Code E V H J	9.0	8.3	8.3	3.1	10.3	0.8 to 1.1
	11.0	10.3	10.3	4.5	10.3	0.8 to 1.1
	11.0	10.3	10.3	4.5	12.5	0.8 to 1.1
	11.0	10.3	10.3	4.5	12.8	0.8 to 1.1
	11.0	10.3	10.3	4.5	12.8	0.8 to 1.1

● Frequency coefficient of rated ripple current

Frequency	120Hz	1kHz	10kHz	100kHz or more
Coefficient	0.15	0.40	0.75	1.00

● Dimension table in next page.



■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA) (at 20°C after 2 minutes)	ESR (mΩ) max. (20°C/100kHz)	Rated Ripple (mArms)		Part Number
						125°C/100kHz	135°C/100kHz	
25 (1E)	150	8×10	0.14	37.5	18	4000	2800	GXC1E151MC□1GS
	220	8×10	0.14	55.0	18	4000	2800	GXC1E221MC□1GS
	270	10×10	0.14	67.5	16	4500	3300	GXC1E271MC□1GS
	330	10×10	0.14	82.5	16	4500	3300	GXC1E331MC□1GS
	470	10×12.5	0.14	117.5	14	5200	3600	GXC1E471MC□1GS
35 (1V)	100	8×10	0.12	35.0	18	4000	2800	GXC1V101MC□1GS
	150	8×10	0.12	52.5	18	4000	2800	GXC1V151MC□1GS
	220	10×10	0.12	77.0	16	4500	3300	GXC1V221MC□1GS
	270	10×10	0.12	94.5	16	4500	3300	GXC1V271MC□1GS
	330	10×12.5	0.12	115.5	15	5000	3500	GXC1V331MC□1GS
50 (1H)	47	8×10	0.10	23.5	24	3600	2500	GXC1H470MC□1GS
	68	8×10	0.10	34.0	24	3600	2500	GXC1H680MC□1GS
	100	10×10	0.10	50.0	20	4300	3000	GXC1H101MC□1GS
	120	10×10	0.10	60.0	20	4300	3000	GXC1H121MC□1GS
	150	10×12.5	0.10	75.0	17	4600	3300	GXC1H151MC□1GS
63 (1J)	33	8×10	0.08	20.8	27	3300	2300	GXC1J330MC□1GS
	47	8×10	0.08	29.6	27	3300	2300	GXC1J470MC□1GS
	56	10×10	0.08	35.3	22	4000	2800	GXC1J560MC□1GS
	68	10×10	0.08	42.8	22	4000	2800	GXC1J680MC□1GS
	82	10×10	0.08	51.7	22	4000	2800	GXC1J820MC□1GS
	100	10×12.5	0.08	63.0	17	4600	3300	GXC1J101MC□1GS

□ : Enter the appropriate configuration code.

- For taping specifications, recommended land size/soldering by reflow and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.