

TGV SERIES

UPGRADE

Load Life : 125°C 3000~5000 hours Low ESR

- ESR standard after endurance test. ( $\phi 8 \cdot \phi 10$ )
- AEC-Q200.



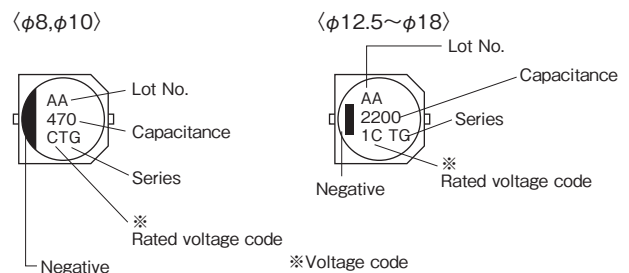
◆SPECIFICATIONS

Items	Characteristics																								
Category Temperature Range	-40~+125°C																								
Rated Voltage Range	16~50Vdc																								
Capacitance Tolerance	±20% (20°C, 120Hz)																								
Leakage Current(MAX)	I=0.01CV or 3μA whichever is greater.(After 2 minutes application of rated voltage) I=Leakage Current(μA)      C=Capacitance (μF)      V=Rated Voltage(Vdc)																								
Dissipation Factor(MAX) (tanδ)	<table border="1"> <tr> <td>Rated Voltage (Vdc)</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>(20°C, 120Hz)</td> </tr> <tr> <td><math>\phi 8 \sim \phi 10</math></td> <td>0.23</td> <td>0.18</td> <td>0.16</td> <td>0.14</td> <td></td> </tr> <tr> <td><math>\phi 12.5 \sim \phi 18</math></td> <td>0.18</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td></td> </tr> </table> <p>When rated capacitance is over 1000μF, tanδ shall be added 0.02 to the listed value with Increase of every 1000 μF.</p>	Rated Voltage (Vdc)	16	25	35	50	(20°C, 120Hz)	$\phi 8 \sim \phi 10$	0.23	0.18	0.16	0.14		$\phi 12.5 \sim \phi 18$	0.18	0.16	0.14	0.12							
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Endurance	<p>After applying rated voltage for specified time at 125°C, the capacitors shall meet the following requirements.</p> <table border="1"> <tr> <td>Capacitance Change</td> <td>Within ±30% of the initial value.</td> <td>Case Size</td> <td>LifeTime (hrs)</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 300% of the specified value.</td> <td><math>\phi D \leq 10</math></td> <td>3000</td> </tr> <tr> <td>Leakage Current</td> <td>Not more than the specified value.</td> <td><math>\phi D \geq 12.5</math></td> <td>5000</td> </tr> </table> <p>ESR standard after endurance test (125°C, 2000 hrs with rated voltage applied)</p> <table border="1"> <tr> <td></td> <td colspan="2">16~35Vdc</td> </tr> <tr> <td></td> <td>8×10.5</td> <td>10×10.5</td> </tr> <tr> <td>20°C</td> <td>0.6</td> <td>0.4</td> </tr> <tr> <td>-40°C</td> <td>4.5</td> <td>3.5</td> </tr> </table> <p>(Ω/100kHz)</p>	Capacitance Change	Within ±30% of the initial value.	Case Size	LifeTime (hrs)	Dissipation Factor	Not more than 300% of the specified value.	$\phi D \leq 10$	3000	Leakage Current	Not more than the specified value.	$\phi D \geq 12.5$	5000		16~35Vdc			8×10.5	10×10.5	20°C	0.6	0.4	-40°C	4.5	3.5
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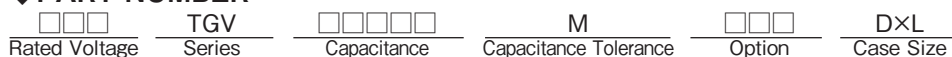
◆MULTIPLIER FOR RIPPLE CURRENT

Frequency (Hz)		120	1k	10k	100k≤
Coefficient	33μF	0.45	0.75	0.90	1.00
	47~100μF	0.50	0.80	0.95	1.00
	220~3300μF	0.60	0.85	0.95	1.00

◆MARKING



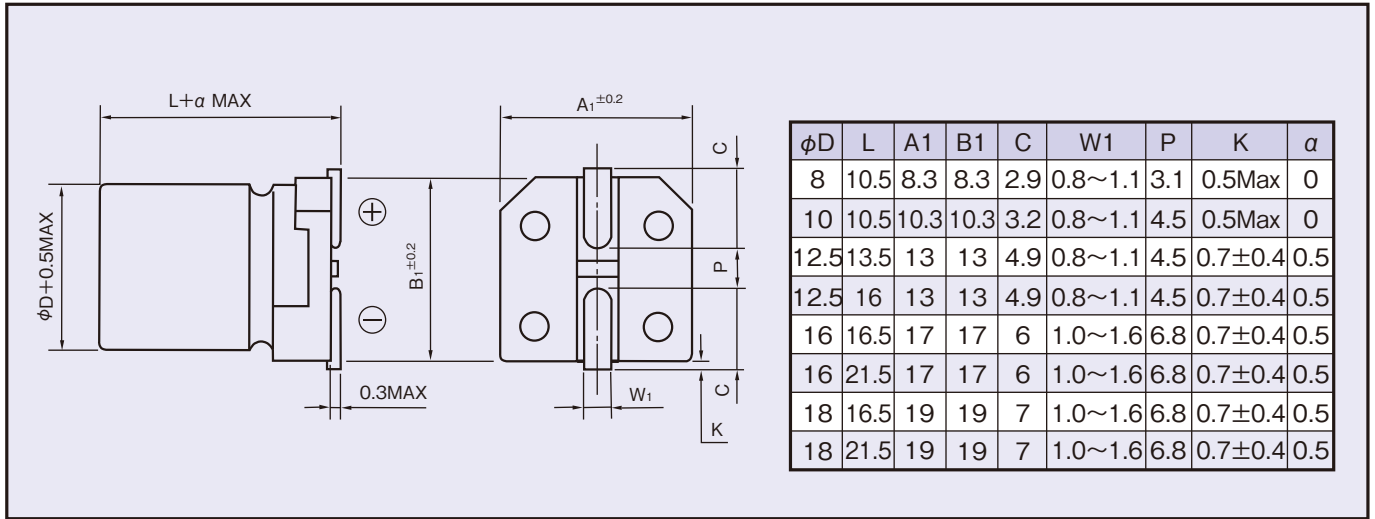
◆PART NUMBER



Rated voltage (Vdc)	16	25	35	50	
Voltage code	$\phi D \leq 10$	C	E	V	H
	$\phi D \geq 12.5$	1C	1E	1V	1H

◆ DIMENSIONS

(mm)



◆ STANDARD SIZE

Size φD×L(mm), Rated Ripple Current(mA r.m.s./125°C, 100kHz), ESR (Ω MAX/100kHz)

Vdc	Cap (μF)	Size (φDXL)	Ripple	ESR	
				20°C	-40°C
16	100	8×10.5	350	0.150	3.0
	220	8×10.5	350	0.150	3.0
	330	10×10.5	550	0.120	2.0
	470	10×10.5	550	0.120	2.0
	820	12.5×13.5	850	0.092	1.1
	1000	12.5×16	1000	0.074	0.9
	1500	16×16.5	1200	0.066	0.7
	1800	18×16.5	1300	0.064	0.6
	2200	16×21.5	1650	0.041	0.4
	3300	18×21.5	1800	0.039	0.3
25	100	8×10.5	350	0.150	3.0
	220	8×10.5	350	0.150	3.0
		10×10.5	550	0.120	2.0
	330	10×10.5	550	0.120	2.0
	680	12.5×13.5	850	0.092	1.1
	820	12.5×16	1000	0.074	0.9
	1200	16×16.5	1200	0.066	0.7
	1500	18×16.5	1300	0.064	0.6
	2200	16×21.5	1650	0.041	0.4
	2700	18×21.5	1800	0.039	0.3
35	47	8×10.5	350	0.150	3.0
	100	8×10.5	350	0.150	3.0
		10×10.5	550	0.120	2.0
	220	10×10.5	550	0.120	2.0
	470	12.5×13.5	850	0.092	1.1
	560	12.5×16	1000	0.074	0.9
	820	16×16.5	1200	0.066	0.7
	1000	18×16.5	1300	0.064	0.6
	1500	16×21.5	1650	0.041	0.4
	1800	18×21.5	1800	0.039	0.3
50	33	8×10.5	300	0.340	6.7
	47	8×10.5	300	0.340	6.7
		10×10.5	500	0.220	4.4
	100	10×10.5	500	0.220	4.4
	360	12.5×16	900	0.150	3.0
	510	16×16.5	950	0.120	2.0
	680	18×16.5	1000	0.110	1.8
	820	16×21.5	1300	0.073	1.3
	1200	18×21.5	1450	0.066	1.1