

### Vertical SMD Type, High Temperature and Long Life Capacitors

For LCD MT/TV  
 Guaranteed 3000 hours at 125°C  
 RoHS compliant  
 Halogen-free

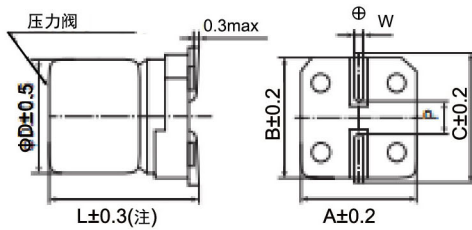


### Specifications

No.	Item	Performance				
1	Temperature range(°C)	-40 to +125				
2	Rated Voltage Range	10-35VDC				
3	Leakage current (µA)	Rated Voltage (VDC)	10-35			
		1 ≦ 0.01CV or 3uA, whichever is greater (at 20°C, 2minutes)				
4	Capacitance tolerance (%)	±20 (20°C, 120Hz)				
5	Tangent of the loss angle (Tan δ)	Rated voltage(V)	10	16	25	35
		Tanδ(max)	0.30	0.23	0.18	0.16
		0.02 is added to each 1000uF increase over 1000uF (20°C, 120Hz)				
6	Low temperature characteristics Impedance ratio (max)	Rated voltage(V)	10	16	25	35
		Z(-25°C)/Z(+20°C)	3	2	2	2
		Z(-40°C)/Z(+20°C)	4	3	3	3
7	Endurance (125°C) (Applied ripple current)	Test time	The following specifications shall be satisfied when the capacitors are restores to 20°C after the rated voltage is applied for 3000 hours at 125°C			
		Rated Voltage(VDC)	10-35			
		Leakage current	The initial specified value or less			
		Percentage of capacitance change	Within ± 30% of initial value			
		Tangent of the loss angle	300% or less of the initial specified value			
8	Shelf life (125°C)	Test time	The following specifications shall be satisfied when the capacitors are restores to 20°C after exposing them for 1000 hours at 125°C without voltage applied. The rated voltage shall be applied to the capacitors for a minimum for 30 minutes, at least 24 hours and not more than 48 hours before the measurements.			
		Rated Voltage(VDC)	10-35			
		Leakage current	The initial specified value or less			
		Percentage of capacitance change	Within ± 30% of initial value			
		Tangent of the loss angle	200% or less of the initial specified value			



### Dimensions

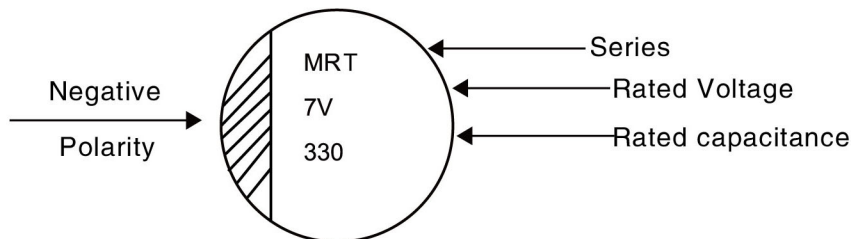


: Dummy terminals

Note1: L±0.5 for 8x9(F090)-10x10.5(G105)

Case Code	D	L	A	B	C	W	P
E090	6.3	9.0	6.6	6.6	7.2	0.5-0.8	1.9
F105	8	10.5	8.3	8.3	9.0	0.7-1.1	3.1
G105	10	10.5	10.3	10.3	11.0	0.7-1.1	4.7

### Marking



### Coefficient of Frequency for Ripple Current

Frequency (Hz)	120	1K	10K	100K
Capacitance(uF)				
47 to 100	0.40	0.75	0.90	1.0
220 to 470	0.50	0.85	0.94	1.0

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use, the rms ripple current has to be reduced.



### DIMENSION & PERMISSIBLE RIPPLE CURRENT

Dimension:  $\Phi$ DXL(mm)  
Ripple Current: mA/rms at 120Hz, 125°C

V.DC Contents $\mu$ F	10V		16V		25V			
	$\Phi$ DXL	mA	$\Phi$ DXL	mA	$\Phi$ DXL	mA	$\Phi$ DXL	mA
47							6.3X9	220
47							8X10.5	350
100			6.3X9	220			8X10.5	350
100			8X10.5	350	8X10.5	350		
220	8X10.5	350	8X10.5	350	10X10.5	550		
330	8X10.5	350	10X10.5	550	10X10.5	550	10X10.5	550
330	10X10.5	550						
470	10X10.5	550	10X10.5	550				

