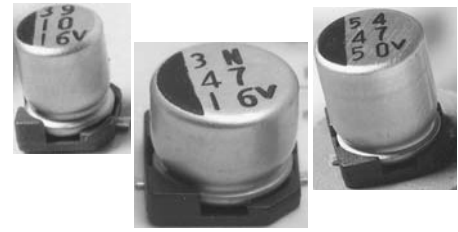


## FEATURES

- VERY LONG LIFE, 7000 ~ 10000 HOURS
- Wide temperature -25°C ~ +105°C
- LOW IMPEDANCE
- Solvent resistant (2 minutes).
- Designed for automatic mounting and reflow soldering.



## PART NUMBERING

Part Number Example: MXEL-016/331M8X10TR13F									
MXEL	-	016	/	331	M	8X10	TR	13	F
Type		Rated DC Voltage		Capacitance Code (μF)*	Tolerance Code	Size	Package Code**	Reel Size	RoHs Compliant
* Capacitance Code: First two digits represent significant figure, third digit represents multiplier (number of zeros).									
** Package Code: TR = Tape & Reel.									

## SPECIFICATIONS

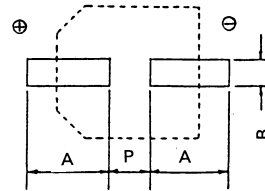
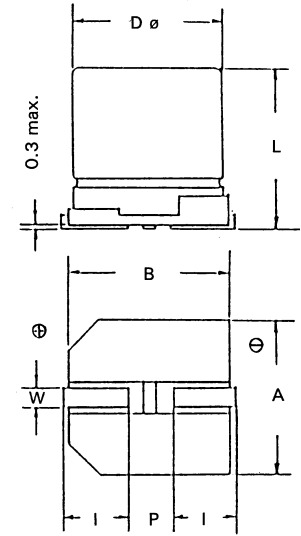
Performance Characteristics							
Operating Temperature Range	-25°C ~ +105°C.						
Temperature Characteristics (120Hz)	Impedance Ratio						
	Rated Voltage (WVDC)	6.3	10	16	25	35	50
	Z (-25°C) / Z (+20°C)	4	3	2	2	2	2
Voltage Range	6.3VDC ~ 50VDC.						
Surge Voltage (20°C, 120Hz)	VDC	8.0	13	20	32	44	63
Capacitance Range	10μF ~ 1000μF.						
Capacitance Tolerance	±20%.						
Maximum Dissipation Factor (20°C, 120Hz)	Rated Voltage (WVDC)	6.3	10	16	25	35	50
	DF %	32	28	26	16	14	14
Maximum Leakage Current (20°C) (after 2 minutes)	0.01CV or 3μA, whichever is greater.						
Load Life Test @ 105°C, 5 & 6.3mm Diam. 7000 hours, 8 & 10mm Diam 10000 hours	Capacitance Change	Within ±30% of initial measured value.					
	DF	Less than 300% of specific value.					
	Leakage Current	Less than specified value.					

## STANDARD PRODUCT TABLE (dØ X L(mm))

Capacitance (μF)	WVDC					
	6.3	10	16	25	35	50
10					5X7.0	
22			5X7.0	5X7.0	5X7.0	
33		5X7.0		6.3X7.0	6.3X8.4	
47	5X7.0		6.3X7.0	6.3X7.0	6.3X8.4	8X10.2
100	6.3X7.0		6.3X7.0	6.3X8.4	8X10.2	10X10.2
150		6.3X7.0	6.3X8.4			
220	6.3X8.4	6.3X8.4		8X10.2	10X10.2	
330	6.3X8.4	6.3X8.4	8X10.2	10X10.2		
470	8X10.2	8X10.2	10X10.2			
1000	10X10.2					

**DIMENSIONS (mm)**

Case Size	d $\varnothing$ $\pm$ 0.5	L Max.	A $\pm$ 0.2	B $\pm$ 0.2	I $\pm$ 0.2	W	P $\pm$ 0.2
5X7.0	5	7.3	5.3	5.3	2.3	0.5 ~ 0.8	1.4
6.3X7.0	6.3	7.3	6.6	6.6	2.55	0.5 ~ 0.8	2.2
6.3X8.4	6.3	8.7	6.6	6.6	2.55	0.5 ~ 0.8	2.2
8X10.2	8	10.5	8.3	8.3	2.9	0.7 ~ 1.0	3.2
10X10.2	10	10.5	10.3	10.3	3.2	1.0 ~ 1.4	4.6



**MAXIMUM RIPPLE (mA rms @ 100KHz & 105°C)**

Capacitance ( $\mu$ F)	WVDC					
	6.3	10	16	25	35	50
10					95	
22			95	95	95	
33		95		140	230	
47	95		140	140	230	350
100	140		140	230	600	670
150		140	230			
220	230		230	600	850	
330	230		600	850		
470	600		850			
1000	850					

**MAXIMUM IMPEDANCE ( $\Omega$  @ 100KHz & 20°C)**

Capacitance ( $\mu$ F)	WVDC					
	6.3	10	16	25	35	50
10					2.2	
22			2.2	2.2	2.2	
33		2.2		1.1	1.0	
47	2.2		1.1	1.1	1.0	0.53
100	1.1		1.1	1.0	0.22	0.35
150		1.1	1.0			
220	1.0		1.0	0.22	0.16	
330	1.0		0.22	0.16		
470	0.22		0.16			
1000	0.16					