

### Surface Mount Type

Series: **M**



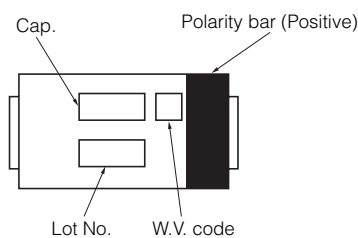
#### ■ Features

- Achieved 40 % miniaturization on together with ultra low ESR of SP-Cap for further design flexibility.
- RoHS directive compliant
- High temperature reflow soldering applicable.  
(Peak : 260 °C 10 s, main heating : 230 °C 40 s)

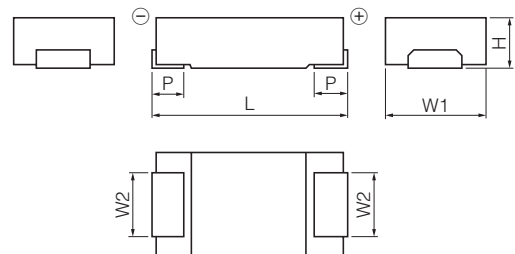
#### ■ Specifications

Category Temp. Range	-40 °C to +105 °C			
Rated W.V.Range	2 V.DC to 6.3 V.DC			
Nominal Cap.Range	47 μF to 120 μF			
Capacitance Tolerance	±20 % (120 Hz/+20 °C)			
DC Leakage Current	I ≤ 0.1 CV (μA) 2 minutes			
tan δ	≤ 0.06 (120 Hz/+20 °C)			
Surge Voltage	Rated Working Voltage × 1.25 (15 °C to 35 °C)			
Endurance	After applying rated working voltage for 1000 hours at 105 °C±2 °C and then being atabilized at +20 °C, Capacitor shall			
	Capacitance change	±10% of initial measured value		
	tan δ	≤ Initial specified value		
	DC leakage current	≤ Initial specified value		
Moisture resistance	After storing for 500 hours at 60 °C, 90 %			
	Capacitance change of initial measurd value	2, 2.5 V.DC	4 V.DC	6.3 V.DC
		+70, -20 %	+60, -20 %	+50, -20 %
	tan δ	≤ 200 % of initial specified value		
	DC leakage current	≤ Initial specified value		

#### ■ Marking



#### ■ Dimensions in mm(not to scale)



(mm)

L±0.2	W1±0.2	W2±0.1	H±0.2	P±0.3
6.0	3.2	1.8	1.9	1.3

\* External of figure are the reference.

#### ■ Standard Products

Series & Size Code	Rated W.V. (V.DC)	Capacitance (±20 %) (μF)	Case Size			Specification		Part number		Min. Packaging Q'ty (pcs)
			L (mm)	W (mm)	H (mm)	*1 Ripple current (Ar.m.s.)	*2 ESR (mΩ max.)	*3 Reflow condition : 240 °C	*3 Reflow condition : 260 °C [Proposal]	
MC	2	120	6.0	3.2	1.9	2.7	12	—	EEFMC0D121R	3000
	2.5	100	6.0	3.2	1.9	2.7	12	—	EEFMC0E101R	3000
	4	82	6.0	3.2	1.9	2.2	18	—	EEFMC0G820R	3000
	6.3	47	6.0	3.2	1.9	2.2	18	—	EEFMC0J470R	3000

\*1: Ripple current (100 kHz/ +20 to +105 °C), \*2: ESR (100 kHz/+20 °C)

\*3: Please confirm EE25 in detail of the Mounting Specifications

Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use. Should a safety concern arise regarding this product, please be sure to contact us immediately.

00 Sep. 2010