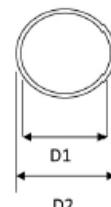
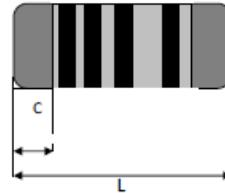


# METAL FILM MELF RESISTOR

## MEMF TYPE

### FEATURES

- SMD style metal resistor.
- High accuracy guaranteed (tolerance  $\pm 0.1\%$  & T.C.R.  $\pm 5\text{PPM}^{\circ}\text{C}$ )
- Free direction for mounting due to cylindrical design.
- Electrode strength is higher than flat chip resistor.
- Lower current noise than thick film flat chip resistor.
- Suitable for reflow, flow and iron soldering.



### DIMENSIONS

Unit : mm

TYPE	POWER	L	C MIN.	D1	D2 MAX.
MEMF-12	1/8W	2.0 $\pm$ 0.1	0.30	1.25 $\pm$ 0.05	1.35
MEMF-25S	1/4W	3.5 $\pm$ 0.2	0.50	1.40 $\pm$ 0.15	1.55
MEMF-50S	1/2W	5.9 $\pm$ 0.2	1.00	2.20 $\pm$ 0.20	2.40
MEMF-50	1/2W	8.5 $\pm$ 0.2	1.50	3.20 $\pm$ 0.20	3.40
MEMF-100SS	1W	5.9 $\pm$ 0.2	1.00	2.20 $\pm$ 0.20	2.40
MEMF-100S	1W	8.5 $\pm$ 0.2	1.50	3.20 $\pm$ 0.20	3.40
MEMF-200SS	2W	8.5 $\pm$ 0.2	1.50	3.20 $\pm$ 0.20	3.40

### RATINGS

TYPE	MEMF-12	MEMF-25S	MEMF-50S	MEMF-50	MEMF-100SS	MEMF-100S	MEMF-200SS	
POWER RATING	1/8W	1/4W	1/2W	1/2W	1W	1W	2W	
MAX. WORKING VOLTAGE	150V	200V	250V	350V	350V	350V	350V	
MAX.OVERLOAD VOLTAGE	300V	400V	500V	700V	700V	700V	700V	
OPERATING TEMP. RANGE	$-55^{\circ}\text{C} \sim +155^{\circ}\text{C}$							
TEMPERATURE COEFFICIENT	$\pm 1\%$ $\pm 0.1\%$ $\pm 0.25\%$ $\pm 0.5\%$	$\pm 25\text{ppm}^{\circ}\text{C}$ ; $\pm 50\text{ppm}^{\circ}\text{C}$ ; $\pm 100\text{ppm}^{\circ}\text{C}$ $\pm 5\text{ppm}^{\circ}\text{C}$ ; $\pm 10\text{ppm}^{\circ}\text{C}$ ; $\pm 15\text{ppm}^{\circ}\text{C}$ ; $\pm 25\text{ppm}^{\circ}\text{C}$						
RESISTANCE RANGE	$\pm 1\%$ $\pm 0.1\%$ $\pm 0.25\%$ $\pm 0.5\%$	10 $\Omega$ – 1M	1 $\Omega$ – 4.7M			0.1 $\Omega$ – 10M		
			100 $\Omega$ – 560K					

### CHARACTERISTICS

TEST	PERFORMANCE REQUIREMENTS	TEST METHOD (JIS-C-5201-1)
T.C.R	Within specified T.C.R	$+25^{\circ}\text{C} / -55^{\circ}\text{C}$ and $+25^{\circ}\text{C} / +125^{\circ}\text{C}$
SOLDERABILITY	More than 95% of the total area of the electrode part	Temperature of soldering : $245 \pm 5^{\circ}\text{C}$ , Time : $3 \pm 0.5$ sec
RESISTANCE TO SOLVENT	Epoxy insulation coating can not be peeled	There are 3 circles, each circle takes 1 min
RESISTANCE TO SOLDERING HEAT	The change of resistance value shall be within $\pm(0.5\% + 0.05\Omega)$	Temperature : $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$ , Dipping time : $10 \pm 1$ sec
SHORT TIME OVERLOAD	The change of the resistance value shall be within $\pm(0.5\% + 0.05\Omega)$	$V = \sqrt{RxPx2.5}$ for 5 sec
OVERLOAD	Within specified tolerance	$V = \sqrt{RxPx3}$ for 2.5 sec
LOAD LIFE IN HUMIDITY	The change of the resistance value shall be within $\pm(1\% + 0.05\Omega)$	$40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ , 90% ~ 95% RH, 1.5hr ON/0.5hr OFF cycle, total test 1,000hrs
LOAD LIFE	The change of the resistance value shall be within $\pm(3\% + 0.05\Omega)$	Constant temperature chamber of $70^{\circ}\text{C} \pm 2^{\circ}\text{C}$ , DC 1.5hr ON/0.5hr OFF cycle, for $1,000 \pm 48$ hrs