

# Carbon Film Leadless Fixed Resistors

## Performance Specification

Temperature Coefficient	1R ~ 100K : $\pm 350\text{PPM}/^\circ\text{C}$ 101K ~ 500K : $\pm 700\text{PPM}/^\circ\text{C}$ 501K ~ 1M : $\pm 1000\text{PPM}/^\circ\text{C}$ 1M ~ 10M : $\pm 1500\text{PPM}/^\circ\text{C}$
Short Time Overload	$\pm(0.5\% + 0.005\Omega)\text{Max}$ , with no evidence of mechanical damage.
Resistance to Soldering	$\pm(1.0\% + 0.05\Omega)\text{Max}$ , with no evidence of mechanical damage.
Pulse Overload	$\pm(1.0\% + 0.05\Omega)\text{Max}$ , with no evidence of mechanical damage.
Load Life	$\pm(2.0\% + 0.05\Omega)\text{Max}$ , with no evidence of mechanical damage.
Load Life in Humidity	$\pm(5.0\% + 0.05\Omega)\text{Max}$ , with no evidence of mechanical damage.
Solderability	95% Coverage Min.

Ordering Procedure: Ex.: MELF Carbon Film type 0204 1/4W-S +/-5% 75Ω Tape/Reel 3000

M C 2 4 S 4 J 0 7 5 0 T 3 0

### Type:

MC12 = Carbon Film 0102  
MC24 = Carbon Film 0204  
MC27 = Carbon Film 0207  
MC39 = Carbon Film 0309

### Wattage:

Normal size:  
W4 = 1/4W  
W2 = 1/2W  
Small size:  
S8 = 1/8W-S  
S4 = 1/4W-S  
S2 = 1/2W-S  
1S = 1W-S  
Extra Small size:  
1U = 1W-SS  
2U = 1W-SS

### Resistance Value:

- E-24 series:  
1<sup>st</sup> digit is "0"  
2<sup>nd</sup> & 3<sup>rd</sup> digits are significant figures of the resistance  
4<sup>th</sup> indicates the number of zeros  
"J" ~ 0.1, "K" ~ 0.01  
Ex. 4.7Ω ~ 47J, 4.7KΩ ~ 472

### Packing Type:

T = Tape/Reel

### Packing Qty:

2 = 2,000 pcs.  
3 = 3,000 pcs.  
B = 2,500 pcs.

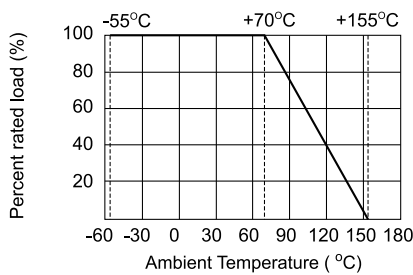
### Additional Information:

0 = NIL

## Features

- SMD carbon resistor
- High tenninal strength
- Excellent solderability
- Suitable for Flow, Reflow and hand soldering

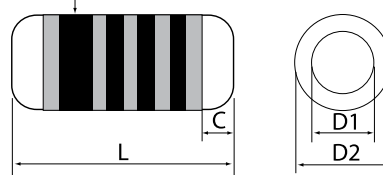
## Derating Curve



### Tolerance:

G =  $\pm 2\%$   
J =  $\pm 5\%$

### 1<sup>st</sup> color band



Part No.	Power Rating at 70°C	Dimension (mm)				Resistance Range	Max Working Voltage	Max Overload Voltage	Std Packing (Reel)
		D1	D2(Max)	L±0.2	C(Min)				
<b>Normal size</b>									
MC27W4	1/4W (0.25W)	2.2±0.2	2.4	5.9	0.5	1Ω ~ 10MΩ	300V	600V	2,000
MC39W2	1/2W (0.50W)	3.2±0.2	3.4	8.5	0.5	1Ω ~ 10MΩ	350V	700V	2,500
<b>Small size</b>									
MC12S8	1/8W(0.125W)	1.2±0.05	1.4	2±0.1	0.4	1Ω ~ 10MΩ	150V	300V	3,000
MC24S4	1/4W (0.25W)	1.4±0.15	1.55	3.5	0.5	1Ω ~ 10MΩ	200V	400V	3,000
MC27S2	1/2W (0.50W)	2.2±0.2	2.4	5.9	0.5	1Ω ~ 10MΩ	300V	600V	2,000
MC271U	1W	2.2±0.1	2.4	5.9	0.5	1Ω ~ 10MΩ	350V	700V	2,000
MC391S	1W	3.2±0.2	3.4	8.5	0.5	1Ω ~ 10MΩ	350V	700V	2,500
MC392U	2W	3.2±0.2	3.4	8.5	0.5	1Ω ~ 10MΩ	350V	700V	2,500