



KOA SPEER ELECTRONICS, INC.

End of Life – last time to buy 3/31/2023

LF

radial metal film leaded resistors

LF1/8, LF1/4, LF14L recommended replacement: MFS1/4

LF1/2 recommended replacement: MFS1/2



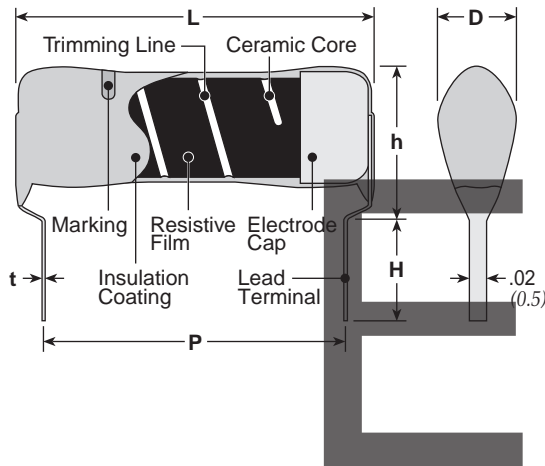
resistors



features

- Lead frame construction
- High density assembly and excellent self-standing strength
- Products with lead-free terminations meet EU RoHS requirements. EU RoHS regulation is not intended for Pb-glass contained in electrode, resistor element and glass.

dimensions and construction



Type	Dimensions inches (mm)					
	L (max.)	D (max.)	P	H	h (max.)	t
LF1/8	.197 (5.0)	.098 (2.5)	.100±.008 (2.54±0.2)	.236±.039 (6.0±1.0)	.200 (5.08)	.010 (0.25)
LF1/4	.295 (7.5)		.200±.008 (5.08±0.2)	.118±.020 (3.0±0.5)	.217 (5.5)	.012 (0.3)
LF1/4L				.217±.020 (5.5±0.5)		
LF1/2	.378 (9.6)		.300±.012 (7.62±0.3)			

ordering information - LF

LF	1/4	C	T	T	A	1000	D
Product Code	Power Rating	T.C.R. (ppm/°C)	Termination Surface Material	Taping	Packaging	Nominal Resistance	Resistance Tolerance
LF	1/8: 0.125W 1/4: 0.25W 1/4L: 0.25W 1/2: 0.5W	C: ±50 D: ±100 L: ±200	T: Sn	T: Taping (1/8W, 1/4W only) Blank: Bulk	Ammo (1/8, 1/4 only)	±2%, ±5%: 2 significant figures + 1 multiplier "R" indicates decimal on value <10Ω ±0.5%, ±1%: 3 significant figures + 1 multiplier "R" indicates decimal on value <100Ω	D: ±0.5% F: ±1% G: ±2% J: ±5%

For 1/4L, only bulk type is available.

LF1/8, LF1/4, LF14L recommended replacement: MFS1/4

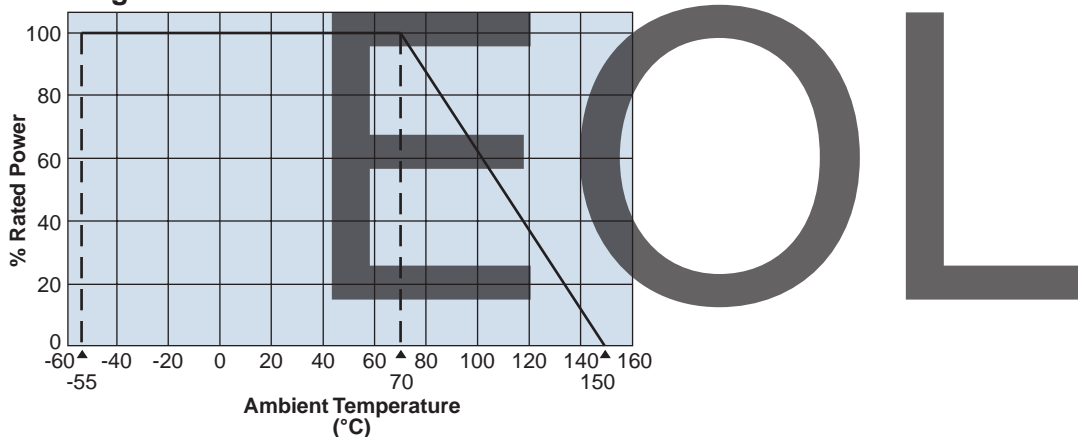
LF1/2 recommended replacement: MFS1/2

applications and ratings

Part Designation	Power Rating	T.C.R. (ppm/°C) Max.	Resistance Range ()				Absolute Maximum Working Voltage	Absolute Maximum Overload Voltage	Rated Ambient Temperature	Operating Temperature Range
			D±0.5% E-96	F±1% E-24,E-96	G±2% E-24	J±5% E-24				
LF1/8	0.125W	C: ±50	45.3 - 562k	4.7 - 1M	1 - 1M	1 - 1M	200V	400V	+70°C	-55°C to +150°C
		D: ±100								
		L: ±200								
LF1/4 LF1/4L	0.25W	C: ±50	10 - 1M	10 - 1M	1 - 1M	1 - 1M	250V	500V	+70°C	-55°C to +150°C
		D: ±100								
		L: ±200								
LF1/2	0.5W	C: ±50	10 - 1M	10 - 1M	1 - 1M	1 - 1M	350V	700V	+70°C	-55°C to +150°C
		D: ±100								
		L: ±200								

environmental applications

Derating Curve



Performance Characteristics

Parameter	Requirement $\Delta R \pm(\% + 0.05\Omega)$	Test Method
Resistance	Within specified tolerance	25°C
T.C.R.	Within specified T.C.R.	+25°C/+125°C
Overload (Short Time)	±0.5%	Rated voltage x 2.5 or max. overload voltage for 5 seconds, whichever is less
Resistance to Solder Heat	±0.25%	260°C ± 5°C, 10 seconds ± 1 second or 350°C ± 10°C, 3.5 seconds ± 0.5 second
Rapid Change of Temperature	±0.5%	-55°C (30 minutes)/+25°C (10 minutes), +150°C (30 minutes)/+25°C (10 minutes), 5 cycles
Moisture Resistance	±1%	40°C ± 2°C, 90-95% RH, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
Endurance @ 70°C	±1%	70°C ± 3°C, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle