Resistors

Commercial Grade Metal Film Resistor

CMF Series

- Metal film resistor
- Conformal coating
- Power ratings from 1/8W to 3W
- Resistance range from 10Ω to $1M\Omega$

NOT RECOMMENDED FOR NEW DESIGNS

CNE

All parts are Pb-free and comply with EU Directive 2011/65/EU amended by (EU) 2015/863 (RoHS3)

Electrical Data

IRC Type	Power Rating at 70°C (W)	Resistance Range (Ohms)	Tolerance (±%)	TCR (±ppm/°C)	Max. Working Voltage (V)	Max. Overload Voltage (V)	Dielectric Withstanding Voltage (V)		
Standard Size									
CMF-1/8	0.125	10 - 1M	1	100	200	400	400		
CMF-1/4	0.25				250	500	500		
CMF-1/2	0.5				350	700	700		
CMF-1	1				500	1000	1000		
CMF-2	2				500	1000	1000		
CMF-3	3				500	1000	1000		

Environmental Data

Short-time overload	$\Delta R/R \le (\pm 0.5\% + 0.05\Omega)$, with no evidence of mechanical damage.		
Dielectric withstanding voltage	No evidence of flashover, mechanical damage, arcing or insulation breakdown.		
Terminal strength	No evidence of mechanical damage.		
Resistance to Soldering heat	$\Delta R/R \le (\pm 1\% + 0.05\Omega)$, with no evidence of mechanical damage.		
Pulse Overload	$\Delta R/R \le (\pm 1\% + 0.05\Omega)$, with no evidence of mechanical damage.		
Solderability	Minimum 95% coverage.		
Resistance to solvent	No deterioration of protective coating and markings.		
Temperature cycling	$\Delta R/R \leq (\pm 1\% + 0.05\Omega)$, with no evidence of mechanical damage.		
Load life in humidity	Standard type: $\Delta R/R \pm 3\%$ for <100K Ω , $\pm 5\%$ for ≥100K Ω ;		
Load life	Standard type: Δ R/R ±1.5% Flame retardant type: R/R ±5%		

General Note

TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

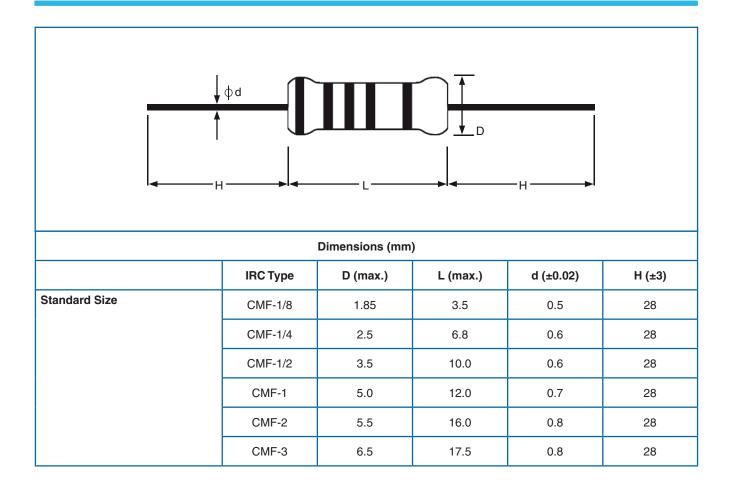
BI Technologies IRC Welwyn



Commerical Grade Metal Film Resistor



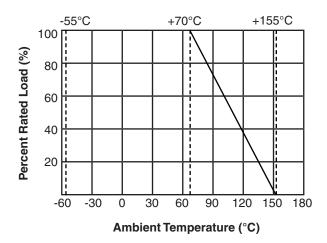
CMF Series NOT RECOMMENDED FOR NEW DESIGNS



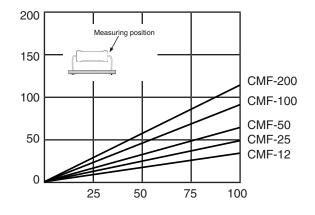
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Derating Curve



Hot Spot Temperature Curve



Ordering Data

Specify type, resistance, tolerance, RoHS-Compliance and packaging. This example is for a Metal Film Resistor, 1-watt, 1000Ω resistor.

Sample Part No CMF - 1 1001 F LF TR
IRC Type - CMF - Metal Film Resistor
Power Rating . (See specs table)
Resistance Value (EIA 4-digit code) $(\geq 100\Omega -$ First 3 significant digits plus 4th digit multiplier)Example: 100 ohms = 1000, 1000 ohms = 1001 $(>100\Omega -$ 1m² is used to designate decimal)Example: $10\Omega =$ 10R0, $1\Omega =$ 1R00, $51\Omega =$ 51R0ToleranceF = ±1%: G = ±2%: J = ±5%
RoHS- compliance LF = RoHS compliant construction Packaging
TR = tape and reel only

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www.ttelectronics.com/resistors

Mouser Electronics

Authorized Distributor

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TT Electronics:

CMF1/41001FLFTF	CMF1/41501FLFT	CMF1/42001FLFTF	CMF1/42211FLFTF	CMF1/42491FLFTR
CMF1/42741FLFTR	CMF1/43011FLFTR	CMF1/43321FLFTR	CMF1/44751FLFTR	CMF1/44991FLFTR
CMF1/45111FLFTR	CMF1/45621FLFTR	CMF1/47501FLFTR	CMF1/41002FLFTR	CMF1/41502FLFTR
CMF1/42002FLFTR	CMF1/42212FLFTR	CMF1/42492FLFTR	CMF1/43012FLFTR	CMF1/43322FLFTR
CMF1/44752FLFTR	CMF1/44992FLFTR	CMF1/41051FLFTR	CMF1/41071FLFTR	CMF1/41101FLFTR
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