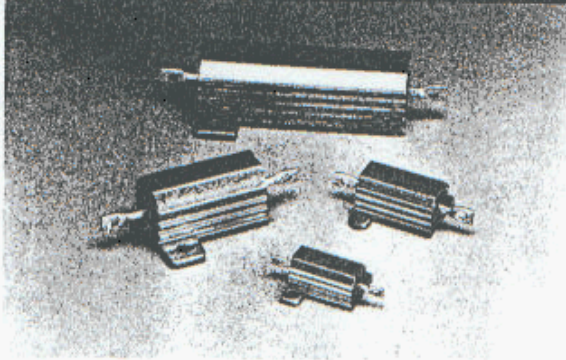


**Series CMC**  
**5, 10, 25, 50 Watt**  
 Wirewound, Aluminum-Housed, Axial-Lead Resistors



**Description**

The CMC series is an exceptionally stable and versatile resistor. The metal housing offers high durability to withstand vibration, shock and harsh environmental conditions. It also offers heat-sinking capabilities and chassis mounting options. Made to MIL-R-18546 standards, the CMC series is axial-lead style, with superior power ratings.

**Features**

- All molded and welded construction
- Screw mounts on chassis surface
- Utilize heat-sink capability
- Complete protection against environment
- Exceeds MIL-R-18546 standards

**Series CMC Material Specifications**

*Housing*  
 Anodized aluminum

*Internal Coating*  
 Silicone

*Core*  
 Ceramic

*Terminals*  
 Copperweld, tinned, axial-lead

*Weight*

CMC5	CMC10	CMC25	CMC50
5 watts	10 watts	25 watts	50 watts
.11 oz.	.25 oz.	.5 oz.	1.04 oz.
3 gms.	7 gms.	14 gms.	29 gms.

**Series CMC Electrical Specifications**

*Resistance Tolerance*  
 $\pm 1\%$  standard

*Power Rating*  
 Based on 275°C maximum hotspot at 25°C ambient temperature

Clarostat Series	MIL Series	Clarostat Wattage	MIL Requirement
CMC5	RE60G	5	5
CMC10	RE65G	10	10
CMC25	RE70G	25	20
CMC50	RE75G	50	30

*Proper heat sink as follows:*

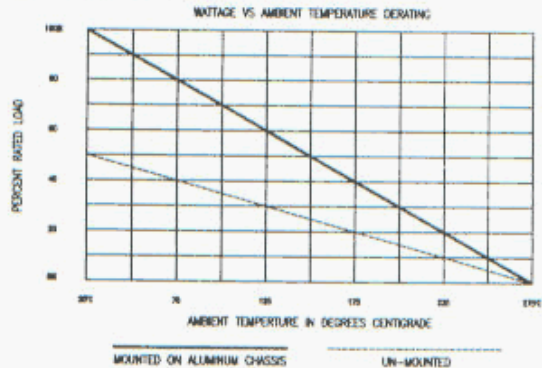
- 4 x 6 x 2 x 0.040 aluminum chassis - 5 & 10 watt units
- 5 x 7 x 2 x 0.040 aluminum chassis - 25 & 50 watt units

*Derating*

CMC resistors are rated to operate with a 275°C maximum hotspot under full rated power at 25°C ambient temperature per MIL-R-18546. They must be derated for higher ambient temperature per "Wattage Vs Ambient Temperature Derating Curve."

Figure 1

**Series CMC Derating**



Electrical Specifications continued, next page

**Overload**

5 times rated wattage for 5 seconds

**Temperature Coefficient**

±90 ppm/°C, under 1 ohm

±50 ppm/°C, 1 ohm to 9.99 ohms

±20 ppm/°C, 10 ohms and over

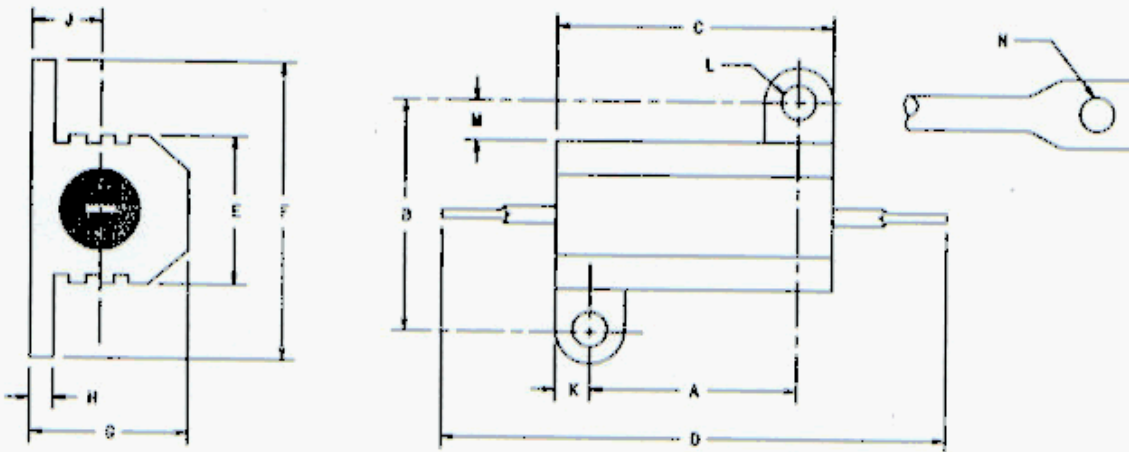
**Dielectric Withstanding Voltage**

1000 Vac: 5 and 10 watt rating

2500 Vac: 25 and 50 watt rating

Figure 2

**Series CMC Dimensions**



	A	B	C	D	E	F	G	H	J	K	L	M	N
<b>Tolerance</b>													
inches	±.005	±.005	±.031	±.062	±.015	±.015	±.015	±.010	±.010	±.010	±.005	±.015	±.005
mm	±0.10	±0.10	±0.80	±1.60	±0.40	±0.40	±0.40	±0.25	±0.25	±0.25	±0.10	±0.10	±0.10
<b>CMC-5</b>													
inches	.444	.490	.600	1.125	.334	.646	.320	.065	.140	.078	.093	.078	0.05
mm	11.28	12.45	15.24	28.58	8.48	16.41	8.13	1.65	3.56	1.98	2.36	1.98	1.27
<b>CMC-10</b>													
inches	.562	.625	.750	1.375	.430	.800	.400	.075	.190	.093	.093	.102	.086
mm	4.27	15.88	19.1	34.93	10.92	20.3	10.2	1.91	4.83	2.4	2.4	2.59	2.18
<b>CMC-25</b>													
inches	.719	.781	1.062	1.938	.530	1.080	.560	.085	.260	.172	.125	.115	.086
mm	18.26	19.84	26.97	49.23	13.46	27.43	14.22	2.16	6.6	4.37	3.18	2.92	2.18
<b>CMC-50</b>													
inches	1.563	.844	1.968	2.781	.615	1.140	.615	.085	.300	.196	.125	.107	.086
mm	39.7	21.44	49.99	70.64	15.62	28.96	15.62	2.16	7.62	4.97	3.18	2.71	2.18

**Series CMC Standard Resistance Values**

**Stock Values (Ohms)**

**Series CMC-5/RE60G\***

.100	1.5	5.11	30	200	750
.200	2.0	10	40	250	1K
.499	3.0	15	50	300	1.5K
.500	4.0	20	100	400	2K
1.00	5.0	25	150	500	2.5K

**Series CMC-10/RE65G\***

.5	4	25	100	400	2K	4.5K
1	5	30	150	500	2.5K	5K
1.5	10	40	200	750	3K	
2	15	50	250	1K	3.5K	
3	20	75	300	1.5K	4K	

**Series CMC-25/RE70G\***

.1	1.5	8	25	100	500	5K
.3	2	10	30	150	750	10K
.5	3	12	40	200	1K	
.7	5	15	50	250	1.5K	
1	6	20	75	300	3K	

**Series CMC-50/RE75G\***

.1	2	10	75	500	3K
.3	3	15	100	750	5K
.5	4	25	150	1K	10K
.7	5	30	200	1.5K	15K
1	8	50	250	2K	25K

*Note:*

*\*Units are dual marked with both commercial and military part numbers.*

**Series CMC How To Order**

**Commercial**

Clarostat Series + Resistance Value = Part Number

Example:  
5 watts + 10 ohm = CMC5-10

**Military**

Military Designator + wattage + temperature characteristic + resistance value + resistance tolerance = part number

Example:  
If 5 watts; RE60 + G + 10R0 + F = RE60G10R0F

- RE=Military Designator
- 60=Wattage
- G=Temperature Characteristic
- 100=Resistance Value
- F=Resistance Tolerance