



# TO-220 Power Resistors

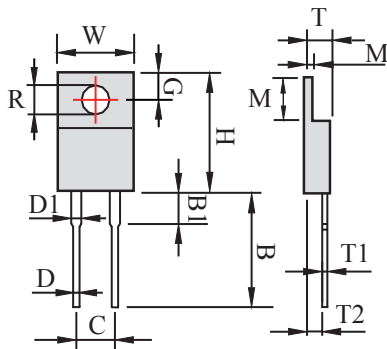
## TO-220 Power Resistors - RMG35 Series / 薄膜功率电阻器

### Power Resistor Features

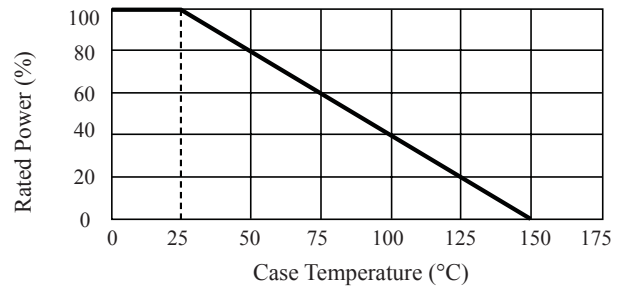
- 35 Watt at 25°C Case Temperature Heat Sink Mounted.
- TO-220 Style Power Package.
- Single Screw Mounting to Heat Sink.
- Low Thermal Resistance to Heat Sink at  $R_{th} < 4.28^{\circ}\text{C}/\text{W}$ .
- Molded Case for Protection and Easy to Mount.
- Isolated Case.
- Non Inductive.

### Applications

- Switching Power Supplies.
- Snubbers Circuits.
- Automated Machine Controller.
- Terminal Resistance in RF Power Amplifiers.
- Voltage Regulation.
- Low Energy Pulse Loading.
- UPS.



Derating Curve



### Dimensions (Unit: mm)

Type	W	H	T	T1	T2	B	B1	C	D	D1	G	R	M	N
RMG35	10.15	16.00	2.92	0.40	1.52	11.43	2.54	4.82	0.66	1.14	2.92	3.08	2.92	3.08
	~	~	~	~	~	~	~	~	~	~	~	~	~	~
	10.67	16.52	3.44	0.60	2.04	13.97	4.06	5.34	0.86	1.40	3.44	3.28	3.44	3.28

### Electrical Characteristics Specifications

Resistance Range	Resistance Tolerance	TCR(PPM/°C)
0.05Ω~1Ω	±5.00%	-
	±10.0%	
2Ω~5Ω	±1.00%	±200
	±5.00%	
	±10.0%	
5Ω~10Ω	±1.00%	±100 ±200
	±5.00%	
	±10.0%	
11Ω~10KΩ	±0.50%	±50 ±100 ±200
	±1.00%	
	±5.00%	
	±10.0%	

- Note: 1. Operating Voltage: 350V Max.  
 2. Dielectric Strength: 1800VAC  
 3. Insulation Resistance: 10GΩmin.  
 4. Working Temperature Range: -65°C to +150°C  
 5. Resistance Value < 1Ω is Available





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## ► Environmental Characteristics

Test Item	Specification	Test Method
Temperature Coefficient of Resistance	10Ω and above, ±50ppm/°C 1Ω and 10Ω, (±100ppm)/°C	Referenced to 25°C, ΔR taken at +105°C
Short Time Overload	Δ R±0.3%	2 times rated power with applied voltage not to exceed 1.5 times maximum continuous operating voltage for 5 seconds.
Load Life	Δ R±1.0%	MIL-R-39009,2,000 hours at rated power.
Humidity (Steady State)	Δ R±0.5%	MIL-STD-202F, Method 103B 40°C, 90~95%RH, RCWV 1.5hours ON, 0.5hours OFF. total 1000~1048 hours.
Thermal Shock	Δ R±0.3%	MIL-STD-202, Method 107G. -65°C~150°C,100 cycle
Terminal Strength	Δ R±0.2%	MIL-STD-202, Method 211, Cond.A(Pull Test) 2.4N.
Vibration, High Frequency	Δ R±0.2%	MIL-STD-202, Method 204, Cond.D.

Note:1.Lead Material: Tinned Copper.

2.Maximum Torque: 0.9 Nm.

3.Without Heat Sink, When in Free Air at 25°C, the RMG35 is Rated for 2.50W.

4.The Case Temperature is to be used for the Definition of the Applied Power Limit.

5.The Case Temperature Measurement Must be Made with a Thermocouple Contacting the Center of the Component Mounted on the Designed Heat Sink.

6.Thermal Grease Should be Applied Properly.

## ► How to Order

RMG	35	J	P	D	1001
①	②	③	④	⑤	⑥

① Product Type: TO-220 Power Resistors

② Power Rating

Code	Power Rating
	35 Watts

③ Resistance Tolerance

Code	Resistance Tolerance
D	±0.5%
F	±1%
G	±2%
J	±5%
K	±10%

④ Packaging

Code	Packaging
T	Tube
P	Bulk

⑤ TCR

Code	TCR
D	±50PPM/°C
E	±100PPM/°C
F	±200PPM/°C
-	No specified

⑥ Resistance

Code	Resistance
0R10	0.1Ω
0100	10Ω
4700	470Ω
1001	1000Ω
1002	10000Ω

