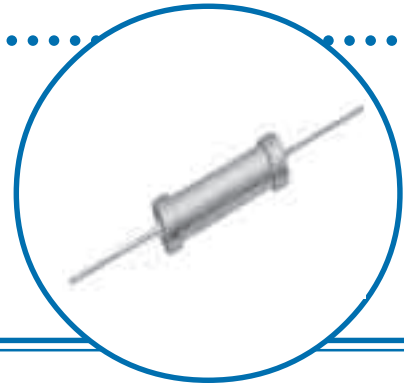


METAL OXIDE RESISTORS

- Flameproof
- Meets overload test of UL#1412
- Meets solvent test of method 215 of MIL-STD-202
- Low cost alternative for power carbon composition and wirewounds
- TCR ± 200 ppm
- Coating meets UL-94V-0



PERFORMANCE CHARACTERISTICS (Tested Per MIL-R-22684 Rev. C):

ELECTRICAL	MO 1/2	MO 1	MO 2	MO 3	MO 5
Power Ratings @ 70°C (watts)	1/2	1	2	3	5
Derated to 0 Load at	200°C	200°C	200°C	200°C	200°C
Maximum Working Voltage (volts)	250	350	350	500	750
Operating Temperature Range	-55°C to +200°C	-55°C to +200°C	-55°C to +200°C	-55°C to +200°C	-55°C to +200°C
Resistance Range (ohms)	0.1 - 75K ($\pm 5\%$) 0.1 - 75K ($\pm 1\%$)	0.1 - 120K ($\pm 5\%$) 0.1 - 100K ($\pm 1\%$)	0.1 - 150K ($\pm 5\%$) 0.1 - 120K ($\pm 1\%$)	1 - 150K ($\pm 5\%$) 10 - 10K ($\pm 1\%$)	1 - 180K ($\pm 5\%$) 10 - 10K ($\pm 1\%$)
Environmental (Operating Temperature Range: -55°C to +200°C)					
Moisture Resistance	$\pm 1.5\%$	$\pm 1.5\%$	$\pm 1.5\%$	$\pm 1.5\%$	$\pm 1.5\%$
Thermal Shock	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$
Load Life @ 70°C - 1000 hrs.	$\pm 2\%$	$\pm 2\%$	$\pm 2\%$	$\pm 2\%$	$\pm 2\%$
Shock and Vibration	$\pm 0.5\%$	$\pm 0.5\%$	$\pm 0.5\%$	$\pm 0.5\%$	$\pm 0.5\%$
Resistance to Soldering Heat	$\pm 0.55+0.05\Omega$	$\pm 0.55+0.05\Omega$	$\pm 0.55+0.05\Omega$	$\pm 0.55+0.05\Omega$	$\pm 0.55+0.05\Omega$
Terminal Strength	$\pm 0.5\%$	$\pm 0.5\%$	$\pm 0.5\%$	$\pm 0.5\%$	$\pm 0.5\%$
Dielectric Withstand Voltage	400V RMS	700V RMS	700V RMS	800V RMS	800V RMS
Maximum Pulse Voltage	400V	750V	1000V	1500V	1500V
Insulation Resistance	10,000 meg min.	10,000 meg min.	10,000 meg min.	10,000 meg min.	10,000 meg min.
Voltage Coefficient	0.001%/V	0.001%/V	0.001%/V	0.001%/V	0.001%/V
Short Time Overload	$\pm(0.5+0.05\Omega)$	$\pm(0.5+0.05\Omega)$	$\pm(0.5+0.05\Omega)$	$\pm(0.5+0.05\Omega)$	$\pm(0.5+0.05\Omega)$

DIMENSIONS (Inches and (mm)):

PACKAGING:

MO 1: 2500/reel
 MO 2: 1000/reel
 MO 3: 1000/ammo box
 MO 5: 1000/bulk box
 All Above: 1000/bulk box

	A	B	C	D
MO 1/2	1.10 \pm 0.08 (28.0 \pm 2.0)	0.35 \pm 0.04 (9.0 \pm 1.0)	0.028 \pm 0.002 (0.70 \pm 0.05)	0.12 \pm 0.02 (3.0 \pm 0.5)
MO 1	1.10 \pm 0.08 (28.0 \pm 2.0)	0.43 \pm 0.04 (11.0 \pm 1.0)	0.028 \pm 0.002 (0.70 \pm 0.05)	0.16 \pm 0.02 (4.0 \pm 0.5)
MO 2	1.50 \pm 0.12 (38.0 \pm 3.0)	0.59 \pm 0.02 (15.0 \pm 0.5)	0.031 \pm 0.002 (0.80 \pm 0.05)	0.22 \pm 0.04 (5.5 \pm 1.0)
MO 3	1.50 \pm 0.12 (38.0 \pm 3.0)	0.98 \pm 0.04 (25.0 \pm 2.0)	0.031 \pm 0.002 (0.80 \pm 0.05)	0.34 \pm 0.04 (8.5 \pm 1.0)
MO 5	1.50 \pm 0.12 (38.0 \pm 3.0)	1.61 \pm 0.04 (41.0 \pm 1.0)	0.031 \pm 0.002 (0.80 \pm 0.05)	0.34 \pm 0.04 (8.5 \pm 1.0)

HOW TO ORDER:

Sample Part No.: **MOM-1 1001 J**

IRC Type

Size

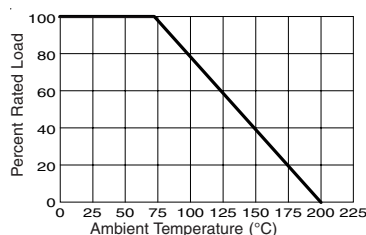
Resistance Value

3 digit range and 1 digit multiplier

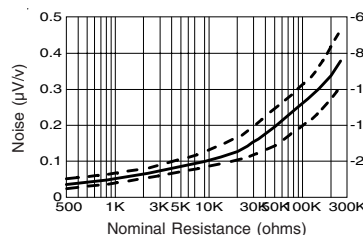
Tolerance

J = 5%, F = 1%

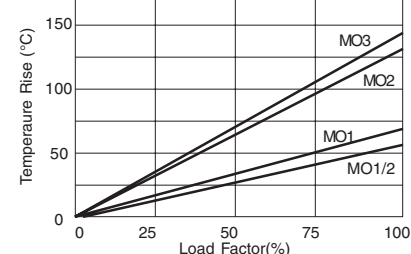
Power - Temperature Derating



Current Noise



Surface Temperature Rise vs Load



General Note

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

WIREWOUND AND FILM TECHNOLOGIES DIVISION

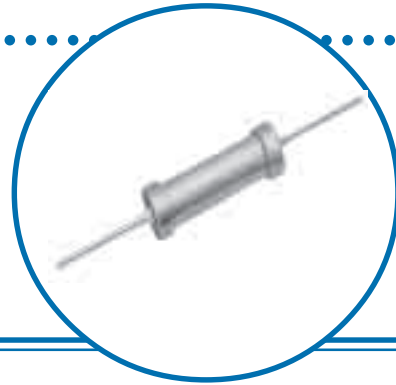
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TT electronics plc
Issue March 2004

METAL OXIDE MINI SERIES RESISTORS

- Flame proof - Meets overload test of UL #1412
- Ideal substitute where size restraints apply
- Offers all electrical/performance characteristics of the standard size Metal Oxide product
- TCR ± 200 ppm
- Coating meets UL-94V-0



PERFORMANCE CHARACTERISTICS (Tested Per MIL-R-22684 Rev. C):

ELECTRICAL	MOM 1/2	MOM 1	MOM 2	MOM 3	MOM 5
Power Ratings @ 70°C (watts)	1/2	1	2	3	5
Derated to 0 Load at	200°C	200°C	200°C	200°C	200°C
Maximum Working Voltage (volts)	250	350	350	350	500
Operating Temperature Range	-55°C to +200°C	-55°C to +200°C	-55°C to +200°C	-55°C to +200°C	-55°C to +200°C
Resistance Range (ohms)	0.1 - 47K ($\pm 5\%$) 0.1 - 47K ($\pm 1\%$)	0.1 - 75K ($\pm 5\%$) 0.1 - 75K ($\pm 1\%$)	0.1 - 100K ($\pm 5\%$) 0.1 - 100K ($\pm 1\%$)	0.1 - 120K ($\pm 5\%$) 0.1 - 120K ($\pm 1\%$)	1 - 150K ($\pm 5\%$) 100 - 4.99K ($\pm 1\%$)

Environmental (Operating Temperature Range: -55°C to +200°C)

Moisture Resistance	$\pm 1.5\%$	$\pm 1.5\%$	$\pm 1.5\%$	$\pm 1.5\%$	$\pm 1.5\%$
Thermal Shock	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$
Load Life @ 70°C - 1000 hrs.	$\pm 2\%$	$\pm 2\%$	$\pm 2\%$	$\pm 2\%$	$\pm 2\%$
Shock and Vibration	$\pm 0.5\%$	$\pm 0.5\%$	$\pm 0.5\%$	$\pm 0.5\%$	$\pm 0.5\%$
Resistance to Soldering Heat	$\pm 0.55 + 0.05\Omega$	$\pm 0.55 + 0.05\Omega$	$\pm 0.55 + 0.05\Omega$	$\pm 0.55 + 0.05\Omega$	$\pm 0.55 + 0.05\Omega$
Terminal Strength	$\pm 0.5\%$	$\pm 0.5\%$	$\pm 0.5\%$	$\pm 0.5\%$	$\pm 0.5\%$
Dielectric Withstand Voltage	400V	600V	600V	600V	800V
Maximum Pulse Voltage	400V	750V	750V	750V	1000V
Insulation Resistance	10,000 meg min.	10,000 meg min.	10,000 meg min.	10,000 meg min.	10,000 meg min.
Voltage Coefficient	0.001%/V	0.001%/V	0.001%/V	0.001%/V	0.001%/V
Short Time Overload	$\pm (0.5\% + 0.05\Omega)$	$\pm (0.5\% + 0.05\Omega)$	$\pm (0.5\% + 0.05\Omega)$	$\pm (0.5\% + 0.05\Omega)$	$\pm (0.5\% + 0.05\Omega)$

DIMENSIONS (Inches and (mm)):

PACKAGING:

MOM 1/2: 5000/reel
 MOM 1, 2: 2500/reel
 MOM 3: 1000/reel
 MOM 5: 1000/ammo box
 All Above: 1000/bulk box

	A	B	C	D
MOM 1/2	1.10 \pm 0.08 (28.0 \pm 2.0)	0.24 \pm 0.01 (6.0 \pm 0.3)	0.024 \pm 0.002 (0.60 \pm 0.05)	0.09 \pm 0.01 (2.3 \pm 0.2)
MOM 1	1.10 \pm 0.08 (28.0 \pm 2.0)	0.35 \pm 0.04 (9.0 \pm 1.0)	0.028 \pm 0.002 (0.70 \pm 0.05)	0.12 \pm 0.02 (3.0 \pm 0.5)
MOM 2	1.10 \pm 0.08 (28.0 \pm 2.0)	0.43 \pm 0.04 (11.0 \pm 1.0)	0.031 \pm 0.002 (0.80 \pm 0.05)	0.16 \pm 0.02 (4.0 \pm 0.5)
MOM 3	1.50 \pm 0.12 (38.0 \pm 3.0)	0.59 \pm 0.02 (15.0 \pm 0.5)	0.031 \pm 0.002 (0.80 \pm 0.05)	0.22 \pm 0.02 (5.5 \pm 0.5)
MOM 5	1.50 \pm 0.12 (38.0 \pm 3.0)	0.98 \pm 0.04 (25.0 \pm 2.0)	0.031 \pm 0.002 (0.80 \pm 0.05)	0.34 \pm 0.04 (8.5 \pm 1.0)

HOW TO ORDER:

Sample Part No.:
MOM-1 1001 J

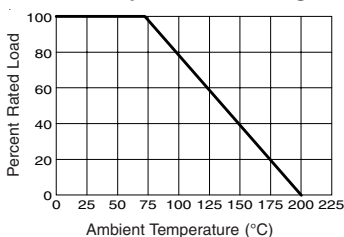
IRC Type **MOM-1** **1001** **J**

Size _____

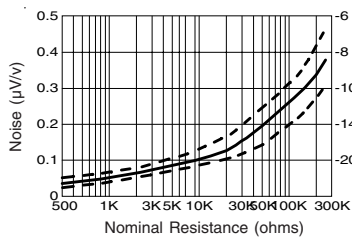
Resistance Value
 3 digit range and
 1 digit multiplier

Tolerance
 J = 5%, F = 1%

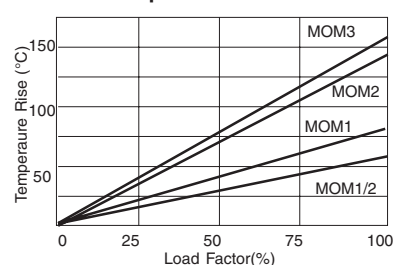
Power - Temperature Derating



Current Noise



Surface Temperature Rise vs Load



General Note

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

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