

Features

- Compliant with AEC-Q200 Rev-C- Stress Test Qualification for Passive Components in Automotive Applications
- Radial leaded devices
- Smaller size for similar lhold rating
- Faster tripping
- RoHS compliant* and halogen free**

MF-RG Series - PTC Resettable Fuses

Agency recognition: c August

Applications

- Automotive applications
- Where space is limited and fast tripping is required

Electrical Characteristics

	V max.	l max.	lhold	l _{trip}	Ini Resis		1 Hour (R ₁) Post-Trip Resistance	Max. Time To Trip		Tripped Power Dissipation
Model	Volts	Amps	Amp at 23		Oh at 2		Ohms at 23 °C	Amperes at 23 °C	Seconds at 23 °C	Watts at 23 °C
			Hold	Trip	Min.	Max.	Max.			Тур.
MF-RG300	16	100	3.00	5.10	0.038	0.065	0.0975	15	1.0	2.30
MF-RG400	16	100	4.00	6.80	0.021	0.0385	0.0600	20	1.7	2.40
MF-RG500	16	100	5.00	8.50	0.015	0.023	0.0340	25	2.0	2.60
MF-RG600	16	100	6.00	10.20	0.010	0.0185	0.0280	30	3.3	2.8
MF-RG650	16	100	6.50	11.10	0.0088	0.0158	0.0240	33	3.5	3.0
MF-RG700	16	100	7.00	11.90	0.0077	0.0130	0.0200	35	3.5	3.0
MF-RG800	16	100	8.00	13.60	0.0056	0.0110	0.0175	40	5.0	3.0
MF-RG900	16	100	9.00	15.30	0.0047	0.0092	0.0135	45	5.5	3.3
MF-RG1000	16	100	10.00	17.00	0.0040	0.0071	0.0102	50	6.0	3.6
MF-RG1100	16	100	11.00	18.70	0.0037	0.0062	0.0089	55	7.0	3.7

Environmental Characteristics

Operating Temperature.....--40 °C to +85 °C

 Passive Aging
 +85 °C, 1000 hours
 ±5 % typical resistance change

 Humidity Aging
 +85 °C, 85 % R.H. 1000 hours
 ±5 % typical resistance change

 Thermal Shock
 -40 °C to +85 °C, 10 times
 ±10 % typical resistance change

 Solvent Resistance
 MIL-STD-202, Method 215
 No change

 Vibratice
 MIL STD -200, Method 2007, d
 No change

 Vibration No change Null-STD-883C, Method 2007.1,..... No change Condition A Moisture Sensitivity Level (MSL) Level 1 ESD Classification - HBM..... Class 6

Test Procedures And Requirements For Model MF-RG Series

Test	Test Conditions	Accept/Reject Criteria
Visual/Mech	Verify dimensions and materials	Per MF physical description
Resistance	In still air @ 23 °C	\dots Rmin \leq R \leq Rmax
Time to Trip	5 times lhold, Vmax, 23 °C	T ≤ max. time to trip (seconds)
Hold Current	30 min. at Ihold	No trip
Trip Cycle Life	Vmax, Imax, 100 cycles	No arcing or burning
Trip Endurance	Vmax, 48 hours	No arcing or burning

Thermal Derating Chart - Ihold (Amps)

Model	Ambient Operating Temperature									
	-40 °C	-20 °C	0 °C	23 °C	40 °C	50 °C	60 °C	70 °C	85 °C	
MF-RG300	4.4	4.0	3.6	3.0	2.6	2.4	2.1	1.9	1.4	
MF-RG400	5.9	5.3	4.8	4.0	3.5	3.2	2.8	2.5	1.9	
MF-RG500	7.3	6.6	6.0	5.0	4.4	4.0	3.6	3.1	2.4	
MF-RG600	8.8	8.0	7.2	6.0	5.2	4.8	4.2	3.8	2.8	
MF-RG650	10.3	9.3	8.4	7.0	6.2	5.6	5.0	4.4	3.3	
MF-RG700	10.3	9.3	8.4	7.0	6.2	5.6	5.0	4.4	3.3	
MF-RG800	11.7	10.7	9.6	8.0	6.9	6.4	5.6	5.1	3.7	
MF-RG900	13.2	11.9	10.7	9.0	7.9	7.2	6.4	5.6	4.2	
MF-RG1000	14.7	13.3	12.0	10.0	8.7	8.0	7.0	6.3	4.7	
MF-RG1100	16.1	14.6	13.1	11.0	9.7	8.8	7.8	6.9	5.2	

Itrip is approximately two times Ihold.



- RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less. Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at <u>www.bourns.com/docs/legal/disclaimer.pdf</u>.

MF-RG Series - PTC Resettable Fuses

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Product Dimensions

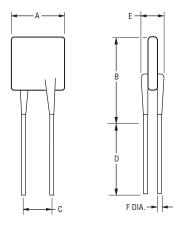
Model	A Max.	B Max.	С		D Min.	E	F	Physical Characteristics	
	wax.	iviax.	Nom.	Tol. ±		Max.	Nom.	Style	Material
MF-RG300	<u>7.1</u> (0.280)	<u>11.0</u> (0.433)	<u>5.1</u> (0.201)	<u>0.7</u> (0.028)	$\frac{7.6}{(0.299)}$	<u>3.0</u> (0.118)	<u>0.81</u> (0.032)	1	Sn/Cu
MF-RG400	<u>9.9</u> (0.350)	<u>12.8</u> (0.504)	<u>5.1</u> (0.201)	<u>0.7</u> (0.028)	$\frac{7.6}{(0.299)}$	<u>3.0</u> (0.118)	<u>0.81</u> (0.032)	1	Sn/Cu
MF-RG500	<u>10.4</u> (0.409)	<u>14.3</u> (0.563)	<u>5.1</u> (0.201)	<u>0.7</u> (0.028)	$\frac{7.6}{(0.299)}$	<u>3.0</u> (0.118)	<u>0.81</u> (0.032)	1	Sn/Cu
MF-RG600	<u>10.7</u> (0.421)	<u>17.1</u> (0.673)	<u>5.1</u> (0.201)	<u>0.7</u> (0.028)	$\frac{7.6}{(0.299)}$	<u>3.0</u> (0.118)	<u>0.81</u> (0.032)	1	Sn/Cu
MF-RG650	<u>11.2</u> (0.441)	<u>19.7</u> (0.776)	<u>5.1</u> (0.201)	<u>0.7</u> (0.028)	$\frac{7.6}{(0.299)}$	<u>3.0</u> (0.118)	<u>0.81</u> (0.032)	1	Sn/Cu
MF-RG700	<u>11.2</u> (0.441)	<u>19.7</u> (0.776)	<u>5.1</u> (0.201)	<u>0.7</u> (0.028)	$\frac{7.6}{(0.299)}$	<u>3.0</u> (0.118)	<u>0.81</u> (0.032)	1	Sn/Cu
MF-RG800	<u>12.7</u> (0.500)	<u>20.9</u> (0.823)	<u>5.1</u> (0.201)	<u>0.7</u> (0.028)	$\frac{7.6}{(0.299)}$	<u>3.0</u> (0.118)	<u>0.81</u> (0.032)	1	Sn/Cu
MF-RG900	<u>14.0</u> (0.551)	<u>21.7</u> (0.854)	<u>5.1</u> (0.201)	<u>0.7</u> (0.028)	$\frac{7.6}{(0.299)}$	<u>3.0</u> (0.118)	<u>0.81</u> (0.032)	1	Sn/Cu
MF-RG1000	<u>16.5</u> (0.650)	<u>21.7</u> (0.854)	<u>5.1</u> (0.201)	<u>0.7</u> (0.028)	$\frac{7.6}{(0.299)}$	<u>3.0</u> (0.118)	<u>0.81</u> (0.032)	1	Sn/Cu
MF-RG1100	<u>17.5</u> (0.689)	<u>26.0</u> (1.024)	<u>5.1</u> (0.201)	<u>0.7</u> (0.028)	<u>7.6</u> (0.299)	<u>3.0</u> (0.118)	<u>0.81</u> (0.032)	1	Sn/Cu

Packaging options:

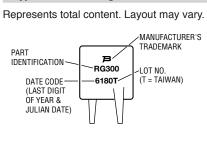
BULK: MF-RG300~MF-RG1100 = 500 pcs. per bag.

TAPE & REEL: MF-RG300~MF-RG500 = 3000 pcs. per reel; MF-RG600~MF-RG1100 = 1000 pcs. per reel.

AMMO-PACK: MF-RG300~MF-RG500 = 2000 pcs. per reel; MF-RG600~MF-RG1100 = 1000 pcs. per reel.



Typical Part Marking



How to Order
MF - RG 300 - 0 - 14
Multifuse® Product Designator Series
RG = Smaller Radial Leaded Component
Hold Current, I _{hold} 300-1100 (3.0 Amps - 11.0 Amps)
Packaging Options - 0 = Bulk Packaging - 2 = Tape and Reel - AP = Ammo-Pak
Part Number Suffix Option

0.81 (20AWG)

Lloui to Ordon

MM

(INCHES)

DIMENSIONS:

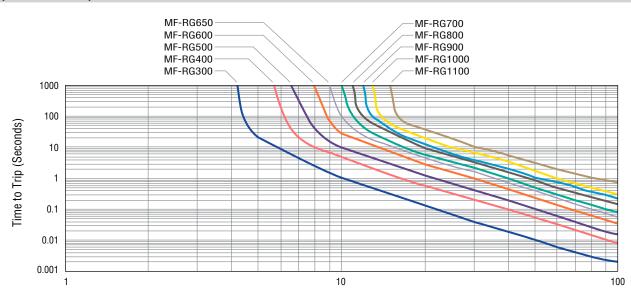
Also available with kinked leads (see How to Order).

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Typical Time to Trip at 23 °C



Fault Current (Amps)

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MF-RG Series Tape and Reel Specifications

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Devices taped using EIA468-B/IEC60286-2 standards. See table below and Figures 1 and 2 for details.

Initial constraints(1/09)(1/00)/(1/00)(1/00)/(1/00)odd down tape W_0 No protusionop distance between tape edges W_2 W_6 $\frac{3}{(118)}$ max.procket hole position W_1 W_5 $\frac{9}{(354)}$ -0.540 , 75procket hole diameter D_0 D_0 $\frac{4}{(157)}$ $\frac{4.02}{(40078)}$ bascissa to plane (straight lead) H H H $\frac{18}{(120)}$ $\frac{4.02}{(4.167)}$ bascissa to plane (straight lead) H_0 H_0 H_0 16 $\frac{4.02}{(4.20)}$ bascissa to plane (kinked lead) H_1 H_1 H_1 H_2 M_2 bascissa to top (kinked lead) H_1 H_1 H_1 M_2 M_2 bascissa to top (kinked lead) C_1 $\frac{21.630}{(11673)}$ max.bascissa to top (kinked lead) C_1 $\frac{21.630}{(11673)}$ max.bascissa to top (kinked lead) C_1 $\frac{11.630}{(11673)}$ max.bascissa to top (kinked lead) C_2 $\frac{24.0}{(21.265)}$ max.bascissa to top (kinked lead) C_2 $\frac{42.5}{(21.265)}$ max.bascissa to top (kinked lead) C_1 $\frac{10.00}{(102)}$ max.bascissa to top (kinked lead) C_2 $\frac{24.0}{(21.265)}$ max.bascissa to top (kinked lead) C_2 $\frac{42.5}{(21.265)}$ max.bascissa top (kinked lead) C_2 $\frac{42.5}{(21.26)}$ max.bascissa top (kinked lead) C_2 $\frac{42.5}{(20.5)}$ max.bascissa top	Dimension Description	IEC Mark	EIA Mark	Dimensions Dimensions Tolerance		
bild down tape width W_4 $\frac{11}{(433)}$ min. bild down tape W_0 No protrusion op distance between tape edges W_2 W_6 $\frac{3}{(118)}$ max. procket hole position W_1 W_5 $\frac{9}{9}$ $\frac{40.2}{(2078)}$ procket hole diameter D_0 D_0 $\frac{41}{(157)}$ $\frac{40.2}{(2078)}$ baciess to plane (straight lead) H H $H^{-1}_{(286)}$ $\frac{a3.0}{(4.22)}$ baciess to plane (kinked lead) H_1 H_1 H_1 H_1 H_1 baciess to top (straight lead) H_1 H_1 H_1 H_1 H_2 max. baciess to top (kinked lead) C_1 $\frac{22.2}{(2.165)}$ max. verall width wilead protrusion (straight lead) C_1 $\frac{43.2}{(4.75)}$ max. verall width wo lead protrusion (kinked lead) C_1 $\frac{41.2}{(4.33)}$ max. rotrusion of cutout L L $\frac{11.0}{(1673)}$ max. rotrusion of cutout L L $\frac{11.0}{(1673)}$ max. rotrusion of cutout L	Carrier tape width	W	W			
bild down tape W_0 No protusion op distance between tape edges W_2 W_0 $\frac{3}{(118)}$ max. piprocket hole position W_1 W_5 9 -0.5440 75 piprocket hole diameter D_0 $\frac{4}{(157)}$ $\frac{4.02}{(40078)}$ backissa to plane (straight lead) H H 118.5 $\frac{4.03}{(4.02)}$ backissa to plane (kinked lead) H_0 H_0 116 $\frac{4.02}{(4.02)}$ backissa to top (kinked lead) H_1 H_1 H_1 28.5 backissa to top (kinked lead) H_1 H_1 H_1 28.5 backissa to top (kinked lead) C_1 (22.165) max. backissa to top (kinked lead) C_1 (22.165) max. backissa to top (kinked lead) C_2 (24.5) max. backissa to top (kinked lead) C_2 (24.5) max. backissa to top (kinked lead) C_2 (24.0) max. backissa to top (kinked lead) C_2 (24.5) max. backis di portusion (kinked lead) C_2	Hold down tape width		W4	11	· · · · · · · · · · · · · · · · · · ·	
op distance between lape begies W_2 W_6 (118) max. procket hole position W_1 W_5 $\frac{9}{(354)}$ $(\frac{5540}{(2024)003})$ procket hole diameter D_0 D_0 $\frac{4}{(157)}$ $\frac{4}{(2007)}$ bacissa to plane (straight lead) H H H 18.5 $s3.0$ bacissa to plane (kinked lead) H_0 H_0 16.5 $\frac{43.0}{(53)}$ $\frac{40.5}{(50)}$ bacissa to top (kinked lead) H_1 H_1 H_1 38.0 max. bacissa to top (kinked lead) H_1 H_1 18.5 $s3.0$ bacissa to top (kinked lead) H_1 H_1 92.2 max. bacissa to top (kinked lead) C_1 $\frac{43.2}{(1.7)}$ max. verall width wile ad protrusion (straight lead) C_2 $\frac{54.0}{(2.126)}$ max. verall width wile lead protrusion (kinked lead) C_2 $\frac{42.5}{(1.673)}$ max. verall width wile lead protrusion (kinked lead) C_2 $\frac{42.5}{(1.673)}$ max. verall width wile lead protrusion (kinked lead) C_2 $\frac{42.5}{(1.673)}$	Hold down tape	W ₀		· · · · ·		
procket hole position W_I W_5 $\frac{9}{(354)}$ $\frac{0.5440}{(0.224003)}$ procket hole diameter D_0 D_0 $\frac{4}{(157)}$ $\frac{40.2}{(4.078)}$ biscissa to plane (straight lead) H H H $\frac{18.5}{(728)}$ $\frac{4.10}{(4.118)}$ biscissa to plane (kinked lead) H_0 H_0 $\frac{16}{(65)}$ $\frac{40.5}{(4.22)}$ biscissa to plane (kinked lead) H_1 H_1 H_1 $\frac{11.360}{(1.360)}$ max.biscissa to top (straight lead) H_1 H_1 H_1 $\frac{32.2}{(2.165)}$ max.verall width wlead protrusion (straight lead) C_1 $\frac{43.2}{(2.165)}$ max.verall width wlead protrusion (straight lead) C_2 $\frac{54.0}{(2.165)}$ max.verall width wlead protrusion (straight lead) C_2 $\frac{54.0}{(2.165)}$ max.verall width wlo lead protrusion (kinked lead) C_2 $\frac{42.5}{(2.126)}$ max.verall width wlo lead protrusion (kinked lead) C_2 $\frac{42.5}{(1.673)}$ max.verall width wlo lead protrusion (kinked lead) C_2 $\frac{42.5}{(1.673)}$ max.verall width wlo lead protrusion (kinked lead) L L $\frac{11}{(1.37)}$ $\frac{40.3}{(2.03)}$ verall width wlo lead protrusion (kinked lead) I_1 L_1 $\frac{10}{(2.39)}$ max.verall width wlo lead protrusion (kinked lead) I_1 I_1 I_1 I_2 verall width wlo lead protrusion (kinked lead) I_1 I_1 I_1 I_2 verall width wlo lead protrusion (kinked lead)<	Top distance between tape edges	W2	W ₆		max.	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Sprocket hole position	W ₁	W_5	9		
baselssa to plane (straight lead) H H (18.5) ± 3.0 baselssa to plane (kinked lead) H ₀ H ₀ (16) ± 0.5 baselssa to plane (kinked lead) H ₁ H ₁ (16) ± 0.5 baselssa to top (straight lead) H ₁ H ₁ (14.96) max. baselssa to top (kinked lead) H ₁ H ₁ (14.96) max. baselssa to top (kinked lead) C_1 (2.65) max. verail width wilead protrusion (straight lead) C_1 (2.165) max. verail width wilead protrusion (kinked lead) C_2 (2.167) max. verail width wilead protrusion (kinked lead) C_2 (1.67) max. verail width wilead protrusion (kinked lead) C_2 (1.67) max. verail width wilead protrusion (kinked lead) C_2 (1.67) max. ead protrusion I_1 L_1 (1.00) max. red protrusion for outout L L (1.02) max. rotrusion beyond hold-down tape I_2 I_2 Not specified	Sprocket hole diameter	D ₀	D ₀	4	±0.2	
baselsas to plane (kinked lead) H_0 H_0 $\frac{16}{(63)}$ $\frac{40.5}{(6.02)}$ baselsas to to (straight lead) H_1 H_1 H_1 $\frac{38.0}{(1.496)}$ max.baselsas to to (kinked lead) H_1 H_1 H_1 $\frac{32.2}{(1.286)}$ max.baselsas to top (kinked lead) C_1 $\frac{55.0}{(2.165)}$ max.overall width w/lead protrusion (straight lead) C_1 $\frac{43.2}{(1.7)}$ max.overall width w/lead protrusion (straight lead) C_2 $\frac{24.2.5}{(1.673)}$ max.overall width w/lead protrusion (straight lead) C_2 $\frac{42.5}{(1.673)}$ max.overall width w/lead protrusion (kinked lead) L L $\frac{11}{(433)}$ max.overall width w/lead protrusion (kinked lead) L L $\frac{11}{(433)}$ max.overall width w/lead protrusion (kinked lead) L L $\frac{11}{(433)}$ max.overall width w/lead protrusion (kinked lead) L L $\frac{11}{(433)}$ max.overall width w/lead protrusion (kinked lead) L L $\frac{11}{(433)}$ max.overall width w/lead protrusion (kinked lead) L L $\frac{11}{(433)}$ max.overall width w/lead protrusion (kinked lead) L L $\frac{11}{(433)}$ max.overall width w/lead protrusion (kinked lead) L L $\frac{11}{(433)}$ max.overall width w/lead protrusion (kinked lead) L L $\frac{11}{(433)}$ max.overall width w/lead protrusion (kinked lead) L L $$	Abscissa to plane (straight lead)	Н	Н	18.5	±3.0	
besissa to top (straight lead) H_1 H	Abscissa to plane (kinked lead)	H ₀	H ₀	16	±0.5	
biscissa to top (kinked lead) H_1 H_2 H_1 H_1 H_1 H_1 H_1 H_2 H_2 H_2 H_2 H_2 H_2 H_2 H_2 H_2 H_1 $H_$	Abscissa to top (straight lead)	H ₁	H ₁	38.0		
overall width w/lead protrusion (straight lead) C_1 $\frac{55.0}{(2,165)}$ max.overall width w/lead protrusion (kinked lead) C_1 $\frac{49.2}{(1,7)}$ max.overall width w/o lead protrusion (straight lead) C_2 $\frac{54.0}{(2,126)}$ max.overall width w/o lead protrusion (straight lead) C_2 $\frac{44.5}{(1,673)}$ max.overall width w/o lead protrusion (straight lead) C_2 $\frac{44.5}{(1,673)}$ max.overall width w/o lead protrusion (kinked lead) L_1 L_1 $\frac{10}{(0.09)}$ max.ead protrusion of cutout L L $\frac{11}{(433)}$ max.trotrusion of cutout L L $\frac{11}{(433)}$ max.trotrusion beyond hold-down tape l_2 l_2 Not specifiedipprocket hole pitch P_0 P_0 $\frac{12.7}{(0.5)}$ $\frac{40.3}{(1000)}$ proteck thole pitch $\frac{25.4}{(1.679)}$ $\frac{a0.3}{(1.000)}$ $\frac{4.01.3}{(2.012)}$ ape thickness t t $\frac{0.9}{(0.05)}$ max.ape thickness with splice t_1 $\frac{2.0}{(0.079)}$ max.tplice sprocket hole alignment $\frac{4.0}{(.157)}$ $\frac{40.7}{(1.609)}$ $\frac{4.07}{(1.615)}$ ody tape plane deviation ΔP_1 P_1 $\frac{3.81}{(0.015)}$ $\frac{4.0.7}{(2.00)}$ ody tape plane deviation ΔP_1 P_1 $\frac{3.81}{(0.015)}$ $\frac{4.0.7}{(2.00)}$ end blance W W W $\frac{5.0.8}{(200)}$ $0.24.0.8$ ided spacing F F F $\frac{5.0.8}{(200)}$ 0.24	Abscissa to top (kinked lead)	H ₁	H ₁	32.2	max.	
Averall width w/lead protrusion (kinked lead) C_1 $\frac{43.2}{(1.7)}$ max.Averall width w/o lead protrusion (straight lead) C_2 $\frac{54.0}{(2.126)}$ max.Averall width w/o lead protrusion (kinked lead) C_2 $\frac{42.5}{(1.673)}$ max.Averall width w/o lead protrusion (kinked lead) C_2 $\frac{42.5}{(1.673)}$ max.ead protrusion l_1 L_1 $\frac{10}{(0.039)}$ max.trotrusion of cutout L L $\frac{11}{(4.33)}$ max.trotrusion beyond hold-down tape l_2 l_2 Not specifiedprocket hole pitch P_0 P_0 $\frac{12.7}{(0.5)}$ $\frac{40.3}{(4.012)}$ the tole path P_0 P_0 $\frac{12.7}{(0.5)}$ $\frac{40.3}{(4.012)}$ perice pitch I I 0.9 0.3 ape thickness I I 0.9 0.3 ape thickness with splice I_1 2.0 max.tody tape plane deviation Δh Δh 0 $\frac{\pm 1.3}{(\pm 0.03)}$ hody tape plane deviation ΔP_1 P_1 $\frac{3.81}{(0.16)}$ $\frac{40.7}{(\pm 0.26)}$ ead spacing F F 5.08 $-0.274.08$ teel width w w $\frac{56.0}{(2.20)}$ max.teel diameter d a $\frac{370.0}{(14.57)}$ max.	Overall width w/lead protrusion (straight lead)		C1	55.0	max.	
Averall width wio lead protrusion (straight lead) C_2 $\frac{54.0}{(2.126)}$ max.Averall width wio lead protrusion (kinked lead) C_2 $\frac{42.5}{(1.673)}$ max.ead protrusion l_1 L_1 $\frac{1.0}{(0.39)}$ max.redrusion of cutout L L $\frac{1}{1.4}$ $\frac{1.0}{(0.439)}$ max.retrusion of cutout L L $\frac{1}{1.43}$ max.retrusion beyond hold-down tape l_2 l_2 Not specifiediprocket hole pitch P_0 P_0 $\frac{12.7}{(0.50)}$ $\frac{4.0.3}{(\pm 0.12)}$ titch tolerance 20 consecutive $\frac{\pm 1}{(\pm 0.39)}$ max.ape thickness t t $\frac{0.9}{(0.35)}$ max.ape thickness with splice t_1 $\frac{2.0}{(0.79)}$ max.tody lateral deviation Δ_h Δ_h Δ_h Δ_h Δ_p 0 $\frac{\pm 1.3}{(0.15)}$ $\frac{\pm 0.7}{(\pm 0.08)}$ tody lateral deviation ΔP_1 P_1 $\frac{3.81}{(0.05)}$ $\frac{\pm 0.7}{(\pm 0.08)}$ ead seating plane deviation ΔP_1 P_1 $\frac{3.81}{(0.15)}$ $\frac{\pm 0.7}{(\pm 0.20)}$ teel width w w $\frac{56.0}{(2.20)}$ max.teel width w w $\frac{370.0}{(2.20)}$ max.teel diameter d a $\frac{370.0}{(14.57)}$ max.	Overall width w/lead protrusion (kinked lead)		C ₁	43.2	max.	
cverall width w/o lead protrusion (kinked lead) C_2 $\frac{42.5}{(1.673)}$ max.ead protrusion l_1 L_1 $\frac{1.0}{(0.39)}$ max.rotrusion of cutout L L $\frac{11}{(4.433)}$ max.trotrusion beyond hold-down tape l_2 l_2 Not specifiedprocket hole pitch P_0 P_0 $\frac{12.7}{(0.5)}$ $\frac{40.3}{(4.012)}$ titch tolerance 20 consecutive $\frac{\pm 1}{(\pm .039)}$ $\frac{\pm 1}{(\pm .039)}$ vevice pitch $\frac{25.4}{(1.000)}$ $\frac{4.0.3}{(\pm .012)}$ $\frac{\pm 0.2}{(\pm .035)}$ ape thickness t t 0.9 $\frac{0.2}{(\pm .035)}$ max.ape thickness t t $\frac{0.9}{(.035)}$ max.iplice sprocket hole alignment $\frac{4.0}{(.157)}$ $\frac{\pm 0.2}{(\pm .038)}$ $\frac{4.0.2}{(\pm .038)}$ tody tape plane deviation ΔP_1 P_1 $\frac{3.81}{(\pm .0351)}$ $\frac{\pm 0.7}{(\pm .028)}$ ead spacing F F 5.08 $\frac{-0.2/+0.8}{(.200)}$ $\frac{-0.2/+0.3}{(.008/+0.31)}$ teel diameter d a $\frac{370.0}{(14.57)}$ max.	Overall width w/o lead protrusion (straight lead)		C2	54.0	max.	
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Proceed the pitchProProTotalProTotal20 consecutive $\frac{\pm 1}{(\pm 0.39)}$ Device pitch $\frac{25.4}{(1.000)}$ $\frac{\pm 0.3}{(\pm 0.12)}$ Device pitch $\frac{25.4}{(1.000)}$ $\frac{\pm 0.3}{(\pm 0.12)}$ Device pitch t t $\frac{0.9}{(0.35)}$ Device pitch t_1 $\frac{2.0}{(0.79)}$ Device pitch t_1 $\frac{2.0}{(0.79)}$ Device pitch $\frac{4.0}{(.157)}$ $\frac{\pm 0.2}{(\pm 0.08)}$ Device pitch $\frac{4.0}{(.157)}$ $\frac{\pm 0.2}{(\pm 0.08)}$ Device pitch Δ_h Δ_h 0 Device pitch $\frac{4.0}{(.157)}$ $\frac{\pm 0.2}{(\pm 0.08)}$ Device pitch $\frac{4.0}{(.157)}$ $\frac{\pm 0.2}{(\pm 0.08)}$ Device pitch Δ_h Δ_h 0 Device pitch Δ_h Δ_h 0 Device pitch $\frac{4.0}{(.157)}$ $\frac{\pm 0.2}{(\pm 0.08)}$ Device pitch Δ_h Δ_h 0 Device pitch Δ_h Δ_h 0 Device pitch $\frac{4.0}{(.157)}$ $\frac{\pm 0.2}{(\pm 0.08)}$ Device pitch Δ_P Δ_P 0 Device pitch Δ_P Δ_P 0 Device pitch Δ_P Δ_P 0 Device pitch $\frac{\pm 0.2}{(.157)}$ $\frac{\pm 0.2}{(.157)}$ Device pitch Δ_P Δ_P 0 Device pitch Δ_P 0 $\frac{\pm 1.3}{(.015)}$ Device pitch Δ_P Φ_P 0 Device pitch Φ_P 0 $\frac{\pm 1.3}{(.008)}$ Device pitch Φ_P </td <td>Protrusion beyond hold-down tape</td> <td>I2</td> <td>I2</td> <td></td> <td></td>	Protrusion beyond hold-down tape	I2	I2			
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Device pitch $\frac{25.4}{(1.000)}$ $\frac{\pm 0.3}{(\pm .012)}$ age thicknesstt $\frac{0.9}{(.035)}$ max.age thickness with splice t_1 $\frac{2.0}{(.079)}$ max.age thickness with splice t_1 $\frac{2.0}{(.157)}$ max.applice sprocket hole alignment $\frac{4.0}{(.157)}$ $\frac{\pm 0.2}{(\pm .008)}$ body lateral deviation Δ_h Δ_h 0 $\frac{\pm 1}{(\pm .039)}$ body tape plane deviation Δ_p Δ_p 0 $\frac{\pm 1.3}{(\pm .051)}$ ead seating plane deviation ΔP_1 P_1 $\frac{3.81}{(.015)}$ $\frac{\pm 0.7}{(.200)}$ ead spacing F F $\frac{5.08}{(.200)}$ $-0.2/+0.8$ keel diameter d a $\frac{370.0}{(.1457)}$ max.teace between flances loss device $\frac{4.75}{(.1457)}$ ± 3.25	Pitch tolerance				±1	
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ape thickness with splice t_1 $\frac{2.0}{(.079)}$ max.splice sprocket hole alignment $\frac{4.0}{(.157)}$ $\frac{\pm 0.2}{(\pm .008)}$ body lateral deviation Δ_h Δ_h 0 $\frac{\pm 1}{(\pm .039)}$ body tape plane deviation Δ_p Δ_p 0 $\frac{\pm 1.3}{(\pm .051)}$ ead seating plane deviation ΔP_1 P_1 $\frac{3.81}{(.015)}$ $\frac{\pm 0.7}{(\pm .028)}$ ead spacing F F $\frac{5.08}{(.200)}$ $\frac{-0.2/+0.8}{(.008/+.031)}$ teel width w w w $\frac{370.0}{(14.57)}$ max.teel diameter d a $\frac{370.0}{(14.57)}$ max.teace between flanges less device $\frac{4.75}{(.14.57)}$ ± 3.25	Tape thickness	t	t	0.9		
Splice sprocket hole alignment $\frac{4.0}{(.157)}$ $\frac{\pm 0.2}{(\pm.008)}$ Body lateral deviation Δ_h Δ_h 0 $\frac{\pm 1}{(\pm.039)}$ Body tape plane deviation Δ_p Δ_p 0 $\frac{\pm 1.3}{(\pm.051)}$ Bed seating plane deviation ΔP_1 P_1 $\frac{3.81}{(.015)}$ $\frac{\pm 0.7}{(\pm.028)}$ Bed spacing F F F $\frac{5.08}{(.200)}$ $\frac{-0.2/+0.8}{(.008/+.031)}$ Beel width w w w $\frac{370.0}{(.14.57)}$ max.Beel diameter d a $\frac{370.0}{(.14.57)}$ max.Brace between flanges less device 4.75 ± 3.25 ± 3.25	Tape thickness with splice		t ₁	2.0	max.	
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ead seating plane deviation ΔP_1 P_1 $\frac{3.81}{(.015)}$ $\frac{\pm 0.7}{(\pm .028)}$ ead spacing F F $\frac{5.08}{(.200)}$ $\frac{-0.2/+0.8}{(.008/+.031)}$ eel width w w w $\frac{56.0}{(2.20)}$ max.eel diameter d a $\frac{370.0}{(14.57)}$ max.teel diameter 4.75 ± 3.25	Body tape plane deviation	Δρ	Δ_{p}	0	±1.3	
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Reel widthww $\frac{56.0}{(2.20)}$ max.Reel diameterda $\frac{370.0}{(14.57)}$ max.Iterace between flanges less device 4.75 ± 3.25	Lead spacing	F	F	5.08	-0.2/+0.8	
da $\frac{370.0}{(14.57)}$ max.the el diameter $\frac{370.0}{(14.57)}$ $\frac{370.0}{(14.57)}$ $\frac{370.0}{(14.57)}$	Reel width	W	W	56.0		
± 3.25	Reel diameter	d	а	370.0	max.	
	Space between flanges less device				<u>±3.25</u> (±.128)	

MM DIMENSIONS:

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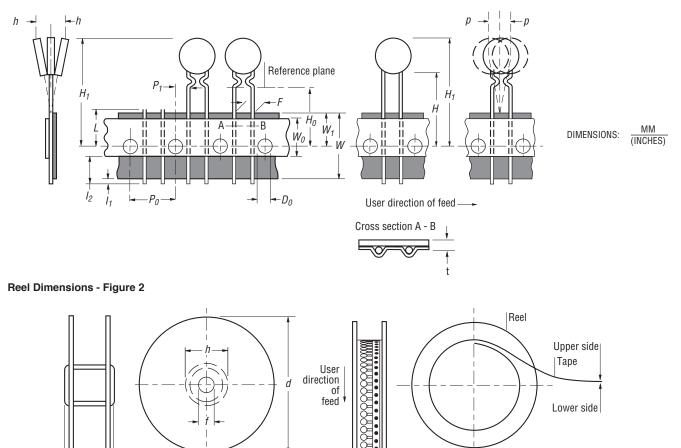
MF-RG Series Tape and Reel Specifications

BOURNS

Lower side

	IEC	EIA	Dimensions		
Dimension Description	Mark	Mark	Dimensions	Tolerance	
Arbor hole diameter	f	С	<u>26.0</u> (1.02)	<u>±12.0</u> (±.472)	
Core diameter	h	п	<u>80.0</u> (3.15)	max.	
Box			$\frac{64}{(2.50)} \frac{372}{(14.6)} \frac{372}{(14.6)}$	nom.	
Consecutive missing places			3	max.	
Empty places per reel			Not specified		

Taped Component Dimensions - Figure 1



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