

### **Features**

- Compliant with AEC-Q200 Rev-C- Stress Test Qualification for Passive Components in Automotive Applications
- Operating temperature range up to 125 °C

MF-RHT Series - High Temperature PTC Resettable Fuses

- Low thermal derating factor
- Higher hold currents at elevated temperature
- Choice of operating currents
- RoHS compliant\* and halogen free\*\*
- Resettable fault protection of general electronic equipment

#### **Electrical Characteristics**

			Ihold	l <sub>trip</sub>	Resis	tance	Max. Time To Trip		Tripped Power Dissipation
Model	V max. Volts		Amperes at 23 °C		Ohms at 23 °C		Amperes at 23 °C	Seconds at 23 °C	Watts at 23 °C
			Hold	Trip	R <sub>Min.</sub>	R <sub>1Max.</sub> (Post Trip)		Max.	Тур.
MF-RHT050	30	40	0.5	0.92	0.4800	1.10	2.5	2.5	0.9
MF-RHT070	16	40	0.7	1.4	0.3000	0.80	3.5	4.0	1.4
MF-RHT100	30	40	1.0	1.8	0.1800	0.43	5.0	5.2	1.4
MF-RHT200	16	100	2.0	3.8	0.0450	0.110	12.5	3.0	1.4
MF-RHT200/32	32	50	2.0	3.8	0.0450	0.110	12.5	3.0	1.4
MF-RHT300	16	100	3.0	6.0	0.0330	0.079	15.0	5.0	3.0
MF-RHT400	16	100	4.0	7.5	0.0240	0.060	20.0	5.0	3.3
MF-RHT450	16	100	4.5	7.8	0.0220	0.054	22.5	3.0	3.6
MF-RHT500	16	100	5.0	9.0	0.0175	0.045	25.0	9.0	3.6
MF-RHT550	16	100	5.5	10.0	0.0150	0.037	27.5	6.0	3.5
MF-RHT600	16	100	6.0	10.8	0.0130	0.0215	30.0	5.0	4.1
MF-RHT650	16	100	6.5	12.0	0.0110	0.026	32.5	5.5	4.3
MF-RHT700	16	100	7.0	13.0	0.0100	0.025	35.0	7.0	4.0
MF-RHT750	16	100	7.5	13.1	0.0094	0.022	37.5	7.0	4.5
MF-RHT800	16	100	8.0	15.0	0.0080	0.020	40.0	8.0	4.2
MF-RHT900	16	100	9.0	16.5	0.0074	0.017	45.0	10.0	5.0
MF-RHT1000	16	100	10.0	18.5	0.0062	0.015	50.0	9.0	5.3
MF-RHT1100	16	100	11.0	20.0	0.0055	0.013	55.0	11.0	5.5
MF-RHT1300	16	100	13.0	24.0	0.0041	0.010	60.0	13.0	6.9

#### **Environmental Characteristics**

Operating Temperature	40 °C to +125 °C	
Storage 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	MIL-STD-202, Method 107	±10 % typical resistance change
	+125 °C to -40 °C, 10 cycles	
Vibration	MIL-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-RHT Series

Test	Test Conditions	Accept/Reject Criteria
Visual/Mech	Verify dimensions and materials	. Per MF physical description
Resistance	In still air @ 23 °C	Rmin ≤ R ≤ R1max
Time to Trip	At specified current, 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
Solderability	MIL-STD-202, Method 208	95 % min. coverage

\*



RoHS Directive 2015/863, Mar 31, 2015 and Annex. Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (CI) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (CI) content is 1500 ppm or less. \* \* Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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### **Applications**

- Protection of automotive circuitry including engine control modules
- Overcurrent surge protection of electronic equipment required to operate at high operating temperature ranges
- Resettable fault protection of general electronic equipment

# MF-RHT Series - High Temperature PTC Resettable Fuses

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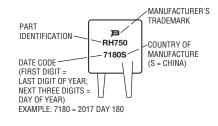
#### Thermal Derating Chart - Ihold (Amps)

Medel	Ambient Operating Temperature											
Model	-40 °C	-20 °C	0 °C	23 °C	40 °C	50 °C	60 °C	70 °C	85 °C	125 °C		
MF-RHT050	0.68	0.62	0.56	0.5	0.44	0.4	0.36	0.34	0.28	0.12		
MF-RHT070	0.95	0.87	0.79	0.7	0.62	0.56	0.51	0.47	0.39	0.17		
MF-RHT100	1.36	1.24	1.13	1.0	0.89	0.80	0.73	0.67	0.56	0.24		
MF-RHT200	2.71	2.49	2.26	2.00	1.77	1.60	1.46	1.34	1.11	0.49		
MF-RHT200/32	2.71	2.49	2.26	2.00	1.77	1.60	1.46	1.34	1.11	0.49		
MF-RHT300	4.07	3.74	3.41	3.00	2.65	2.40	2.21	2.00	1.66	0.74		
MF-RHT400	5.57	5.11	4.65	4.00	3.62	3.29	3.01	2.73	2.27	1.01		
MF-RHT450	6.1	5.6	5.1	4.5	4.0	3.6	3.3	3.0	2.5	1.1		
MF-RHT500	6.78	6.22	5.67	5.0	4.44	4	3.67	3.33	2.78	1.22		
MF-RHT550	7.47	6.86	6.24	5.5	4.85	4.41	4.04	3.66	3.05	1.36		
MF-RHT600	8.20	7.50	6.80	6.0	5.3	4.9	4.4	4	3.3	1.5		
MF-RHT650	8.8	8.1	7.4	6.5	5.7	5.3	4.8	4.3	3.6	1.6		
MF-RHT700	9.51	8.73	7.95	7.0	6.17	5.61	5.15	4.66	3.88	1.73		
MF-RHT750	10.2	9.4	8.6	7.5	6.6	6.1	5.6	5.0	4.1	1.9		
MF-RHT800	10.87	9.98	9.08	8.0	7.06	6.41	5.88	5.33	4.43	1.97		
MF-RHT900	12.21	11.19	10.16	9.0	7.97	7.20	6.56	6.04	5.01	2.19		
MF-RHT1000	13.6	12.5	11.4	10.0	8.8	8.10	7.40	6.60	5.50	2.5		
MF-RHT1100	14.94	13.72	12.49	11.0	9.7	8.82	8.09	7.32	6.09	2.71		
MF-RHT1300	17.7	16.3	14.8	13.0	11.4	10.5	9.6	8.6	7.2	3.3		

#### How to Order MF - RHT 200/32 -- 14 Multifuse® Product Designator Series RHT = High Temperature Radial Leaded Component Hold Current, Ihold 050 - 1300 (0.50 - 13.00 Amps) Higher Voltage Option Blank = Standard Voltage /32 = 32 Volts Packaging Options — Blank = Bulk Packaging - 2 = Tape & Reel\* - AP = Ammo-Pak\* Part Number Suffix Option -- 14 = Kinked Leads in Place of Std. Straight Leads - 17 = Straight Leads in Place of Std. Kinked Leads

#### **Typical Part Marking**

Represents total content. Layout may vary.



\*Packaged per EIA 486-B

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## **MF-RHT Series - High Temperature PTC Resettable Fuses**

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#### **Product Dimensions**

Model	A B		(	C	D	E	F	Physical Characteristics		
woder	Max.	Max.	Nom.	Tol. ±	Min.	Max.	Nom.	Style	Material	
	7.40	12.7	5.1	0.7	7.6	3.0	0.51	0		
MF-RHT050	(0.291)	(0.500)	(0.201)	(0.028)	(0.30)	(0.12)	(0.020)	3	Sn/CuFe	
MF-RHT070	6.86	10.8	5.1	0.7	7.6	3.0	0.51	1	Sn/CuFe	
	(0.27)	(0.425)	(0.201)	(0.028)	(0.30)	(0.12)	(0.020)	1	Sh/Our e	
MF-RHT100	9.70	13.6	5.1	0.7	7.6	3.0	0.51	3	Sn/CuFe	
	(0.382)	(0.535)	(0.201)	(0.028)	(0.30)	(0.12)	(0.020)			
MF-RHT200	9.4 (0.37)	<u>14.0</u> (0.55)	$\frac{5.1}{(0.201)}$	<u>0.7</u> (0.028)	<u>7.6</u> (0.30)	<u>3.0</u> (0.12)	<u>0.51</u> (0.020)	3	Sn/CuFe	
	9.4	14.0	5.1	0.7	7.6	3.0	0.51			
VF-RHT200/32	$\frac{9.4}{(0.37)}$	(0.55)	(0.201)	$\frac{0.7}{(0.028)}$	$\frac{7.0}{(0.30)}$	(0.12)	$\frac{0.51}{(0.020)}$	3	Sn/CuFe	
	8.80	13.8	5.1	0.7	7.6	3.0	0.81	Style 3 1 3 3	0.10	
MF-RHT300	(0.35)	(0.55)	(0.201)	(0.028)	(0.30)	(0.12)	(0.032)		Sn/Cu	
MF-RHT400	10.0	15.0	5.1	0.7	7.6	3.0	0.81	2	Sn/Cu	
WIF-NH1400	(0.394)	(0.591)	(0.201)	(0.028)	(0.30)	(0.12)	(0.032)		۷	31/00
MF-RHT450	10.4	15.6	5.1	0.7		3.0	0.81	2	Sn/Cu	
	(0.41)	(0.61)	(0.201)	(0.028)	(0.30)	(0.12)	(0.032)	-		
MF-RHT500	11.2	18.9	5.1	0.7	7.6	3.0	0.81	2	Sn/Cu	
	(0.441)	(0.744)	(0.201)	(0.028)	(0.30)	(0.12)	(0.032)			
MF-RHT550	$\frac{11.2}{(0.441)}$	$\frac{18.9}{(0.744)}$	$\frac{5.1}{(0.201)}$	<u>0.7</u> (0.028)	7.6 (0.30)	<u>3.0</u> (0.12)	<u>0.81</u> (0.032)	2	Sn/Cu	
	11.2	21.0	5.1	0.7	7.6	3.0	0.81			
MF-RHT600	(0.441)	$\frac{21.0}{(0.827)}$	(0.201)	$\frac{0.7}{(0.028)}$	(0.30)	(0.12)	$\frac{0.01}{(0.032)}$	2	Sn/Cu	
	12.7	22.2	5.1	0.7	7.6	3.0	0.81		0	0
MF-RHT650	(0.50)	(0.88)	(0.201)	(0.028)	(0.30)	(0.12)	(0.032)	2	Sn/Cu	
MF-RHT700	14.0	21.9	5.1	0.7	7.6	3.0	0.81	2	Sn/Cu	
	(0.55)	(0.862)	(0.201)	(0.028)	(0.30)	(0.12)	(0.032)	2	Sil/Cu	
MF-RHT750	14.0	23.5	5.1			3.0	0.81	2	Sn/Cu	
	(0.55)	(0.93)	(0.201)	(0.028)	(0.30)	(0.12)	(0.032)	2	Of#Ou	
MF-RHT800	16.5	22.5	5.1	0.7	7.6	3.0	0.81	2	Sn/Cu	
	(0.65)	(0.88)	(0.201)	(0.028)	(0.30)	(0.12)	(0.032)			
MF-RHT900	16.5	25.7	$\frac{5.1}{(0.001)}$	$\frac{0.7}{(0.028)}$	7.6	<u>3.0</u> (0.12)	$\frac{0.81}{(0.020)}$	2	Sn/Cu	
	(0.65)	(1.012)	(0.201)	(0.028)	(0.30)		(0.032)			
MF-RHT1000	<u>17.5</u> (0.689)	<u>26.7</u> (0.51)	$\frac{10.2}{(0.402)}$	$\frac{0.7}{(0.028)}$	<u>7.6</u> (0.30)	<u>3.0</u> (0.12)	$\frac{0.81}{(0.032)}$	2	Sn/Cu	
	21.0	26.1	10.2	0.7	7.6	3.0	0.81			
VF-RHT1100	(0.65)	(0.88)	$\frac{10.2}{(0.402)}$	(0.028)	(0.30)	(0.12)	$\frac{0.01}{(0.032)}$	2	Sn/Cu	
	23.5	28.7	10.2	0.7	7.6	3.6	1.0		0	
MF-RHT1300	(0.925)	(1.17)	(0.402)	(0.028)	(0.30)	(0.14)	(0.040)	2	Sn/Cu	

#### Packaging:

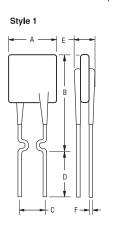
BULK: MF-RHT050~MF-RHT800 = 500 pcs. per bag; MF-RHT900~MF-RHT1300 = 250 pcs. per bag TAPE & REEL: MF-RHT050~MF-RHT400 = 3000 pcs. per reel; MF-RHT450~MF-RHT700 = 1500 pcs. per reel; MF-RHT750~MF-RHT1300 = 1000 pcs. per reel

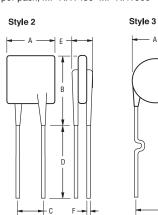
AMMO-PACK: MF-RHT050~MF-RHT400 = 2000 pcs. per pack; MF-RHT450~MF-RHT900 = 1000 pcs. per pack, MF-RHT1000~MF-RHT1300 = 500 pcs. per pack

F

D

- C





Also available with kinked and straight leads in place of standard leads (see How to Order).

DIMENSIONS:

(INCHES)

0.51 (24AWG)

0.81 (20AWG)

1.0 (18AWG)

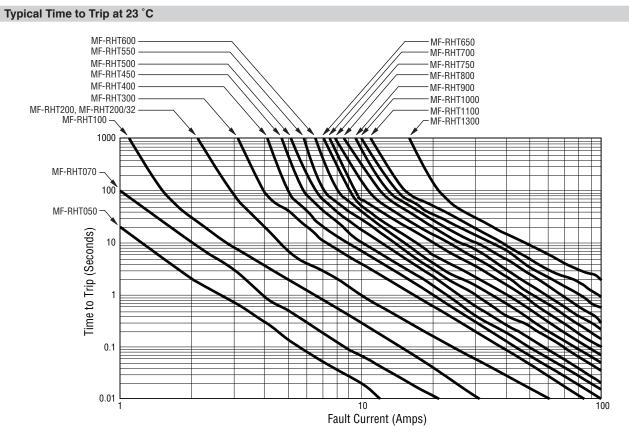
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# MF-RHT Series - High Temperature PTC Resettable Fuses

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The Time to Trip curves represent typical performance of a device in a simulated application environment. Actual performance in specific customer applications may differ from these values due to the influence of other variables.

MF-RHT SERIES, REV. N, 05/18

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# MF-RHT 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.

Carrier tape widthW $\frac{18}{(.709)}$ $\frac{-0.5/+1.0}{(-0.02/+.039)}$ Hold down tape width $W_0$ $W_4$ $\frac{11}{(.433)}$ min.Hold down tapeNo protrusion3		IEC	EIA	Dimensions		
Variet rape widthWW(709)(0.02+.039)Hold down tape width $W_0$ $W_4$ $\frac{11}{(433)}$ min.Hold down tapeNo protrusionTop distance between tape edges $W_2$ $W_6$ $\frac{3}{(118)}$ max.Sprocket hole position $W_1$ $W_5$ $\frac{9}{(354)}$ $\frac{-0.574075}{(2027+078)}$ Sprocket hole diameter $D_0$ $D_0$ $\frac{4}{(157)}$ $\frac{4}{(20078)}$ Abscissa to plane (straight lead) $H$ $H$ $H$ $\frac{18.5}{(228)}$ $\frac{43.0}{(2027+038)}$ Abscissa to plane (straight lead) $H_0$ $H_0$ $16$ $\frac{40.5}{(233)}$ $\frac{40.5}{(20078)}$ Abscissa to plane (straight lead) $H_1$ $H_1$ $H_1$ $\frac{32.2}{(228)}$ max.Abscissa to to to: MF-RHT500 ~ MF-RHT450 $H_1$ $H_1$ $H_1$ $\frac{42.5}{(228)}$ max.Overall width whead protrusion: MF-RHT500 ~ MF-RHT450 $C_2$ $\frac{42.5}{(24.5)}$ max.Overall width whead protrusion: MF-RHT500 ~ MF-RHT450 $C_2$ $\frac{42.5}{(2.165)}$ max.Coreall width whead protrusion: MF-RHT500 ~ MF-RHT1300 $C_1$ $\frac{10.0}{(2.163)}$ max.Coreall width who lead protrusion: MF-RHT500 ~ MF-RHT1300 $C_2$ $\frac{54.0}{(2.165)}$ max.Coreall width who lead protrusion: MF-RHT500 ~ MF-RHT1300 $C_2$ $\frac{54.0}{(2.256)}$ max.Coreall width who lead protrusion: MF-RHT500 ~ MF-RHT1300 $C_2$ $\frac{54.0}{(2.550)}$ max.Device pitch $\frac{2.5.4}{(2.56)}$ $\frac{40.3}{(2.56)}$ $\frac{40.3}{(2.56)}$ Device	Dimension Description	Mark	Mark	Dimensions	Tolerance	
Hold down tape $W_0$ $W_4$ $(443)$ mn.         Hold down tape       No protrusion         Top distance between tape edges $W_2$ $W_6$ $\frac{3}{(116)}$ max.         Sprocket hole position $W_1$ $W_5$ $\frac{9}{(354)}$ $\frac{60.540.75}{(6.00240.03)}$ Sprocket hole diameter $D_0$ $D_0$ $\frac{4}{(4.33)}$ $\frac{40.2}{(6.0076)}$ Abscissa to plane (straight lead) $H$ $H$ $H$ $(1157)$ $(16.0076)$ Abscissa to plane (kinked lead) $H_0$ $H_0$ $H_0$ $\frac{12.2}{(12.08)}$ max.         Abscissa to top: MF-RHT050 ~ MF-RHT450 $H_1$ $H_1$ $H_1$ $\frac{4.2.5}{(1.573)}$ max.         Overall width whead protrusion: MF-RHT050 ~ MF-RHT450 $C_1$ $\frac{(21.65)}{(1.573)}$ max.         Overall width whead protrusion: MF-RHT050 ~ MF-RHT1300 $C_2$ $\frac{54.0}{(1.573)}$ max.         Overall width whead protrusion: MF-RHT050 ~ MF-RHT1300 $C_2$ $\frac{54.0}{(1.573)}$ max.         Overall width whead protrusion: MF-RHT050 ~ MF-RHT1300 $C_2$ $\frac{54.0}{(1.573)}$ max.         Develop intrusion $I_1$ $L_1$ $(1.0029)$ m	Carrier tape width	W	W			
Top distance between tape edges $W_2$ $W_6$ $\frac{3}{(118)}$ max.         Sprocket hole position $W_1$ $W_5$ $\frac{9}{(354)}$ $\frac{-0.5/40.75}{(20.02/40.03)}$ Sprocket hole diameter $D_0$ $D_0$ $\frac{40.2}{(1.57)}$ $\frac{40.2}{(4.0078)}$ Abscissat to plane (straight lead) $H$ $H$ $H$ $H$ $\frac{40.2}{(1.57)}$ $\frac{40.2}{(4.0078)}$ Abscissat to plane (straight lead) $H_0$ $H_0$ $H_0$ $\frac{16}{(53)}$ $\frac{40.2}{(4.02)}$ Abscissat to plane (kinked lead) $H_0$ $H_0$ $\frac{16}{(1.53)}$ $\frac{40.5}{(4.02)}$ Abscissat to top: MF-RHT500 ~ MF-RHT450 $H_1$ $H_1$ $H_1$ $\frac{42.5}{(1.673)}$ max.         Overall width w/lead protrusion: MF-RHT500 ~ MF-RHT450 $C_1$ $\frac{55.0}{(2.165)}$ max.         Overall width w/lead protrusion: MF-RHT500 ~ MF-RHT300 $C_1$ $\frac{55.0}{(1.673)}$ max.         Overall width w/lead protrusion: MF-RHT500 ~ MF-RHT450 $C_2$ $\frac{42.5}{(1.673)}$ max.         Devial width w/lead protrusion: MF-RHT500 ~ MF-RHT450 $C_2$ $\frac{(2.50)}{(2.165)}$ max.         Devial width w/lead protrusion: MF-RHT500 ~ MF-RHT450 $C_2$ <t< td=""><td>Hold down tape width</td><td>WO</td><td><math>W_4</math></td><td></td><td>min.</td></t<>	Hold down tape width	WO	$W_4$		min.	
up of since between tape edges $W_2$ $W_6$ $\left(\frac{1116}{10}\right)$ max.Sprocket hole position $W_1$ $W_5$ $\frac{9}{(354)}$ $\left(\frac{1002+002}{(002+002)}\right)$ Sprocket hole diameter $D_0$ $D_0$ $\frac{4}{(157)}$ $\frac{4002}{(1607)}$ Abscissa to plane (straight lead) $H$ $H$ $H$ $\frac{18.5}{(728)}$ $\frac{4002}{(2007)}$ Abscissa to plane (kinked lead) $H_0$ $H_0$ $\frac{16}{(639)}$ $\frac{405}{(202)}$ Abscissa to plane (kinked lead) $H_0$ $H_0$ $\frac{16}{(639)}$ $\frac{405}{(202)}$ Abscissa to top: MF-RHT050 ~ MF-RHT450 $H_1$ $H_1$ $\frac{41}{(1.837)}$ max.Abscissa to top: MF-RHT500 ~ MF-RHT300 $H_1$ $H_1$ $\frac{42.5}{(1.673)}$ max.Overall width whead protrusion: MF-RHT050 ~ MF-RHT450 $C_1$ $\frac{42.5}{(2.165)}$ max.Overall width whead protrusion: MF-RHT500 ~ MF-RHT450 $C_2$ $\frac{42.5}{(2.165)}$ max.Overall width wholead protrusion: MF-RHT500 ~ MF-RHT450 $C_2$ $\frac{42.5}{(2.163)}$ max.Overall width wholead protrusion: MF-RHT500 ~ MF-RHT1300 $C_1$ $\frac{(2.510)}{(2.216)}$ max.Device bitch $L$ $L$ $11$ $1.0$ max.Protrusion of cutout $L$ $L$ $L$ $\frac{11.6}{(309)}$ max.Lead protrusion: MF-RHT500 ~ MF-RHT1300 $V_1$ $\frac{2.54}{(2.167)}$ $\frac{40.3}{(0.09)}$ Protrusion of cutout $L$ $L$ $\frac{11.6}{(305)}$ $\frac{40.3}{(4.002)}$ Device pitch $\frac{2.54}{(1.603)}$ $\frac{40.3}{(2.02)}$ $\frac{40.6}{(1.6$	Hold down tape			No protrusion		
Sprocket noie position $W_1$ $W_5$ $(\overline{(354)}]$ $(\overline{(0.02/+0.03)})$ Sprocket hole diameter $D_0$ $D_0$ $\frac{4}{(157)}$ $(\overline{(\pm 0.076)})$ Abscissa to plane (straight lead) $H$ $H$ $18.5$ $\underline{43.0}$ Abscissa to plane (kinked lead) $H_0$ $H_0$ $16$ $\underline{4.0.5}$ Abscissa to top: MF-RHT050 ~ MF-RHT450 $H_1$ $H_1$ $32.2$ max.Abscissa to top: MF-RHT050 ~ MF-RHT450 $H_1$ $H_1$ $(1.22.6)$ max.Abscissa to top: MF-RHT500 ~ MF-RHT1300 $H_1$ $H_1$ $(1.637)$ max.Overall width w/lead protrusion: MF-RHT050 ~ MF-RHT450 $C_1$ $(2.165)$ max.Overall width w/lead protrusion: MF-RHT050 ~ MF-RHT1300 $C_2$ $(2.165)$ max.Overall width w/lead protrusion: MF-RHT050 ~ MF-RHT1300 $C_2$ $(2.165)$ max.Overall width w/o lead protrusion: MF-RHT050 ~ MF-RHT1300 $C_2$ $(2.165)$ max.Overall width w/o lead protrusion: MF-RHT050 ~ MF-RHT1300 $C_2$ $(2.165)$ max.Overall width w/o lead protrusion: MF-RHT050 ~ MF-RHT1300 $C_2$ $(2.165)$ max.Protrusion of cutout $L$ $L$ $(1.33)$ max.Protrusion beyond hold-down tape $l_2$ $l_2$ Not specifiedSprocket hole pitch $(2.04)$ $(2.04)$ $(2.04)$ $(2.04)$ Tape thickness $t$ $t$ $0.9$ $(2.04)$ $(2.04)$ Tape thickness with splice: MF-RHT300 ~ MF-RHT1300 $t_1$ $(2.03)$ $(2.04)$ Tape t	Top distance between tape edges	W2	W <sub>6</sub>		max.	
Dypoteck in total interimtDgDgDgCg(157)(±078)Abscissa to plane (straight lead)HHH $\frac{18.5}{(728)}$ $\frac{43.0}{(4.118)}$ Abscissa to plane (kinked lead)HgHg $\frac{16.5}{(63)}$ $\frac{40.5}{(4.202)}$ Abscissa to top: MF-RHT050 ~ MF-RHT450H1H1 $\frac{32.2}{(1.6268)}$ max.Abscissa to top: MF-RHT050 ~ MF-RHT450H1H1 $\frac{45.0}{(1.673)}$ max.Overall width w/lead protrusion: MF-RHT050 ~ MF-RHT450C1 $\frac{42.5}{(1.673)}$ max.Overall width w/lead protrusion: MF-RHT050 ~ MF-RHT450C2 $\frac{42.5}{(1.673)}$ max.Overall width w/lead protrusion: MF-RHT050 ~ MF-RHT450C2 $\frac{42.5}{(1.673)}$ max.Overall width w/lead protrusion: MF-RHT050 ~ MF-RHT450C2 $\frac{42.5}{(2.165)}$ max.Deverall width w/lead protrusion: MF-RHT500 ~ MF-RHT1300C2 $\frac{25.4}{(1.673)}$ max.Lead protrusion of cutoutLL $\frac{11}{(1.433)}$ max.Protrusion of cutoutLL $\frac{11}{(4.33)}$ max.Protrusion beyond hold-down tapeI2I2Not specifiedSprocket hole pitch $\frac{25.4}{(1.03)}$ $\frac{40.0}{(1.05)}$ $\frac{40.2}{(4.022)}$ Tape thicknessttt $\frac{0.9}{(0.055)}$ max.Tape thickness with splice: MF-RHT030 ~ MF-RHT1300t1 $\frac{2.3}{(1.091)}$ $\frac{40.2}{(1.035)}$ max.Tape thickness with splice: MF-RHT030 ~ MF-RHT1300t1 $\frac{2.3}{(1.035)}$ $\frac{40.0}{(1.57)}$ $\frac{40.0}{(1.57)}$ <t< td=""><td>Sprocket hole position</td><td>W1</td><td><math>W_5</math></td><td></td><td></td></t<>	Sprocket hole position	W1	$W_5$			
Abscissa to plane (triagen tead)HH(728)(±118)Abscissa to plane (kinked lead) $H_0$ $H_0$ $\frac{16}{(63)}$ $\frac{40.5}{(\pm 02)}$ Abscissa to top: MF-RHT050 ~ MF-RHT450 $H_1$ $H_1$ $H_1$ $\frac{32.2}{(1.268)}$ max.Abscissa to top: MF-RHT500 ~ MF-RHT450 $H_1$ $H_1$ $\frac{41.5}{(1.673)}$ max.Overall width w/lead protrusion: MF-RHT050 ~ MF-RHT450 $C_1$ $\frac{42.5}{(1.673)}$ max.Overall width w/lead protrusion: MF-RHT500 ~ MF-RHT1300 $C_1$ $\frac{55.0}{(2.165)}$ max.Overall width w/lead protrusion: MF-RHT500 ~ MF-RHT1300 $C_2$ $\frac{42.5}{(1.673)}$ max.Overall width w/lead protrusion: MF-RHT500 ~ MF-RHT1300 $C_2$ $\frac{54.0}{(2.126)}$ max.Overall width w/lead protrusion: MF-RHT500 ~ MF-RHT1300 $C_2$ $\frac{54.0}{(2.126)}$ max.Protrusion of cutout $L$ $L$ $\frac{11}{(4.33)}$ max.Protrusion of cutout $L$ $L$ $\frac{11}{(4.33)}$ max.Protrusion beyond hold-down tape $l_2$ $l_2$ Not specifiedSprocket hole pitch $\frac{25.4}{(1.00)}$ $\frac{40.6}{(\pm 0.21)}$ $\frac{40.6}{(\pm 0.23)}$ Device pitch $\frac{1.5}{(0.35)}$ max. $\frac{40.6}{(\pm 0.23)}$ max.Tape thickness $t$ $t$ $0$ $\frac{41}{(\pm 0.39)}$ max.Device pitch $\frac{1.5}{(0.59)}$ max. $\frac{40.6}{(\pm 0.24)}$ $\frac{40.6}{(\pm 0.24)}$ Tape thickness with splice: MF-RHT300 ~ MF-RHT1300 $t_1$ $\frac{1.5}{(\pm 0.026)}$ $\frac{40.3}{(\pm 0.25)}$ Body lateral d	Sprocket hole diameter	D <sub>0</sub>	D <sub>0</sub>			
Abscissa to piahe (kinked lead) $H_0$ $H_0$ $(63)$ $(\pm 02)$ Abscissa to top: MF-RHT050 ~ MF-RHT450 $H_1$ $H_1$ $H_1$ $H_1$ $H_1$ $(1.387)$ max.Abscissa to top: MF-RHT500 ~ MF-RHT1300 $H_1$ $H_1$ $H_1$ $(1.673)$ max.Overall width w/lead protrusion: MF-RHT050 ~ MF-RHT050 $C_1$ $(1.673)$ max.Overall width w/lead protrusion: MF-RHT050 ~ MF-RHT1300 $C_1$ $(5.50)$ max.Overall width w/lead protrusion: MF-RHT050 ~ MF-RHT450 $C_2$ $(1.673)$ max.Overall width w/lead protrusion: MF-RHT050 ~ MF-RHT450 $C_2$ $(1.673)$ max.Overall width w/lead protrusion: MF-RHT500 ~ MF-RHT450 $C_2$ $(1.673)$ max.Overall width w/lead protrusion: MF-RHT500 ~ MF-RHT1300 $C_2$ $(1.673)$ max.Deverall width w/lead protrusion: MF-RHT500 ~ MF-RHT1300 $L_1$ $(1.673)$ max.Lead protrusion $I_1$ $L_1$ $(1.673)$ max.Protrusion of cutout $L$ $L$ $(1.673)$ max.Protrusion beyond hold-down tape $I_2$ $I_2$ Not specifiedSprocket hole pitch $P_0$ $P_0$ $(1.5)$ $(\pm 0.24)$ Tape thickness $t$ $t$ $0.9$ $(0.5)$ $(\pm 0.24)$ Tape thickness with splice: MF-RHT300 ~ MF-RHT200 $t_1$ $(1.57)$ $(\pm 0.26)$ Tape thickness with splice: MF-RHT300 ~ MF-RHT300 $t_1$ $(0.91)$ max.Splice sprocket hole alignment $(4.0)$ $4.0.2$ $((1.57))$ $(\pm$	Abscissa to plane (straight lead)	Н	Н			
Abscissa to top:MF-RHT050MF-RHT450 $H_1$ <td>Abscissa to plane (kinked lead)</td> <td>H<sub>0</sub></td> <td>H<sub>0</sub></td> <td></td> <td></td>	Abscissa to plane (kinked lead)	H <sub>0</sub>	H <sub>0</sub>			
Abscissa to top: MF-RHT500 ~ MF-RHT1300 $H_1$ $H_1$ $\frac{45.0}{(1.837)}$ max.Overall width w/lead protrusion: MF-RHT050 ~ MF-RHT450 $C_1$ $\frac{42.5}{(1.673)}$ max.Overall width w/lead protrusion: MF-RHT500 ~ MF-RHT1300 $C_1$ $\frac{55.0}{(2.165)}$ max.Overall width w/lead protrusion: MF-RHT500 ~ MF-RHT450 $C_2$ $\frac{42.5}{(1.673)}$ max.Overall width w/lead protrusion: MF-RHT050 ~ MF-RHT450 $C_2$ $\frac{54.0}{(2.126)}$ max.Overall width w/lead protrusion: MF-RHT500 ~ MF-RHT1300 $C_2$ $\frac{54.0}{(2.126)}$ max.Overall width w/lead protrusion: MF-RHT500 ~ MF-RHT1300 $C_2$ $\frac{54.0}{(2.126)}$ max.Protrusion of cutout $L$ $L$ $\frac{11}{(433)}$ max.Protrusion of cutout $L$ $L$ $\frac{11}{(433)}$ max.Protrusion beyond hold-down tape $l_2$ $l_2$ $l_2$ Not specifiedSprocket hole pitch $\frac{254}{(1.67)}$ $\frac{\pm 0.3}{(\pm 0.12)}$ $\frac{\pm 0.3}{(\pm 0.24)}$ Device pitch $\frac{254}{(1.699)}$ $\frac{\pm 0.6}{(1.0)}$ $\frac{\pm 0.6}{(\pm 0.24)}$ Tape thickness with splice: MF-RHT300 ~ MF-RHT200 $t_1$ $\frac{1.5}{(0.991)}$ max.Splice sprocket hole alignment $\frac{4.0}{(1.57)}$ $\frac{\pm 0.2}{(1.673)}$ max.Splice sprocket hole alignment $\frac{4.0}{(1.57)}$ $\frac{\pm 0.2}{(1.57)}$ $\frac{\pm 0.3}{(2.091)}$ Body lateral deviation $\Delta_h$ $\Delta_h$ 0 $\frac{\pm 0.3}{(\pm 0.39)}$ Body lateral deviation $\Delta_p$ $\Delta_p$ 0 $\frac{\pm 0.3}{(\pm 0.39)}$ Corrinate to adjecent compon	Abscissa to top: MF-RHT050 ~ MF-RHT450	H <sub>1</sub>	H <sub>1</sub>			
Overall width w/lead protrusion: MF-RHT050 ~ MF-RHT1300 $C_1$ $\frac{42.5}{(1.673)}$ max.Overall width w/lead protrusion: MF-RHT050 ~ MF-RHT1300 $C_1$ $\frac{55.0}{(2.165)}$ max.Overall width w/lead protrusion: MF-RHT050 ~ MF-RHT1300 $C_2$ $\frac{42.5}{(1.673)}$ max.Overall width w/lead protrusion: MF-RHT050 ~ MF-RHT450 $C_2$ $\frac{42.5}{(1.673)}$ max.Overall width w/lead protrusion: MF-RHT050 ~ MF-RHT1300 $C_2$ $\frac{54.0}{(2.126)}$ max.Overall width w/lead protrusion: MF-RHT500 ~ MF-RHT1300 $C_2$ $\frac{54.0}{(2.126)}$ max.Lead protrusion $l_1$ $L_1$ $1.0$ max.Protrusion of cutout $L$ $L$ $\frac{11}{(.433)}$ max.Protrusion of cutout $L$ $L$ $\frac{11}{(.433)}$ max.Protrusion beyond hold-down tape $l_2$ $l_2$ Not specifiedSprocket hole pitch $20$ consecutive $\frac{1}{(.103)}$ $\frac{10.3}{(.102)}$ Device pitch $\frac{25.4}{(1.09)}$ $\frac{10.6}{(t.024)}$ $\frac{10.6}{(t.024)}$ Tape thickness $t$ $t$ $t$ $\frac{0.9}{(0.095)}$ max.Tape thickness with splice: MF-RHT050 ~ MF-RHT200 $t_1$ $\frac{1.5}{(.109)}$ $\frac{4.0}{(t.57)}$ $\frac{4.0}{(t.57)}$ Splice sprocket hole alignment $\frac{4.0}{(.157)}$ $\frac{4.0}{(t.57)}$ $\frac{4.0}{(t.57)}$ $\frac{4.0}{(t.507)}$ Body lateral deviation $\Delta_h$ $\Delta_h$ $0$ $\frac{4.1}{(t.038)}$ $\frac{4.0}{(t.57)}$ Body lateral deviation $\Delta_p$ $\Delta_p$ $\Delta_p$ $0$ $\frac{4.1}{(t.038)}$ <t< td=""><td>Abscissa to top: MF-RHT500 ~ MF-RHT1300</td><td>H<sub>1</sub></td><td>H<sub>1</sub></td><td>45.0</td><td>max.</td></t<>	Abscissa to top: MF-RHT500 ~ MF-RHT1300	H <sub>1</sub>	H <sub>1</sub>	45.0	max.	
Overall width Wield profrusion: MF-RH1500 ~ MF-RH1500 $C_1$ $(2.165)$ Iftex.Overall width w/o lead protrusion: MF-RHT050 ~ MF-RHT450 $C_2$ $\frac{42.5}{(1.673)}$ max.Overall width w/o lead protrusion: MF-RHT500 ~ MF-RHT1300 $C_2$ $\frac{54.0}{(2.126)}$ max.Lead protrusion $l_1$ $L_1$ $\frac{1.0}{(.039)}$ max.Protrusion of cutout $L$ $L$ $\frac{11}{(.433)}$ max.Protrusion beyond hold-down tape $l_2$ $l_2$ Not specifiedSprocket hole pitch $P_0$ $P_0$ $\frac{12.7}{(0.5)}$ $\frac{\pm 0.3}{(\pm 012)}$ Device pitch $\frac{25.4}{(1.0)}$ $\frac{\pm 0.6}{(\pm 0.29)}$ max.Tape thickness $t$ $t$ $0.9.9$ max.Tape thickness with splice: MF-RHT050 ~ MF-RHT1300 $t_1$ $\frac{2.3}{(.091)}$ max.Splice sprocket hole alignment $\frac{4.0}{(1.57)}$ $\frac{\pm 0.2}{(\pm 0.39)}$ max.Device pitch $\frac{2.0}{(1.57)}$ $\frac{\pm 0.2}{(.59)}$ max.Tape thickness with splice: MF-RHT050 ~ MF-RHT1300 $t_1$ $\frac{2.3}{(.091)}$ max.Splice sprocket hole alignment $\frac{4.0}{(.157)}$ $\frac{\pm 0.2}{(\pm 0.09)}$ Body lateral deviation $\Delta_h$ $\Delta_h$ $0$ $\frac{\pm 1}{(\pm 0.39)}$ Body lateral deviation $\Delta_p$ $\Delta_p$ $0$ $\frac{\pm 0.07}{(\pm 0.39)}$ Orrigate to adjacent component lead $P_4$ $P_4$ $P_4$ $0.7$	Overall width w/lead protrusion: MF-RHT050 ~ MF-RHT450		C <sub>1</sub>	42.5	max.	
Overall with w/o lead protrusion: MF-RHT000 ~ MF-RHT1300 $C_2$ $(1.673)$ Iffax.Overall with w/o lead protrusion: MF-RHT500 ~ MF-RHT1300 $C_2$ $\frac{54.0}{(2.126)}$ max.Lead protrusion $l_1$ $L_1$ $\frac{1.0}{(0.39)}$ max.Protrusion of cutout $L$ $L$ $\frac{11}{(4.33)}$ max.Protrusion beyond hold-down tape $l_2$ $l_2$ $l_2$ Not specifiedSprocket hole pitch $P_0$ $P_0$ $\frac{12.7}{(0.5)}$ $\frac{\pm 0.3}{(\pm 0.12)}$ Prich tolerance $20$ consecutive $\frac{\pm 1}{(\pm 0.39)}$ $\frac{\pm 1}{(\pm 0.39)}$ Device pitch $\frac{25.4}{(1.0)}$ $\frac{\pm 0.6}{(1.0)}$ $\frac{\pm 0.6}{(\pm 0.24)}$ Tape thickness with splice: MF-RHT050 ~ MF-RHT200 $t_1$ $\frac{1.5}{(0.059)}$ max.Tape thickness with splice: MF-RHT300 ~ MF-RHT1300 $t_1$ $\frac{2.3}{(1.57)}$ $\frac{\pm 0.2}{(1.57)}$ Splice sprocket hole alignment $\frac{4.0}{(1.57)}$ $\frac{\pm 0.2}{(1.57)}$ $\frac{\pm 1}{(\pm 0.39)}$ Body lateral deviation $\Delta_h$ $\Delta_h$ $\Delta_h$ $0$ $\frac{\pm 1}{(\pm 0.39)}$ Body lateral deviation $\Delta_p$ $\Delta_p$ $0$ $\frac{\pm 0.07}{(\pm 0.12)}$ Orriginate to adjacent component lead $P_d$ $P_d$ $P_d$ $P_d$	Overall width w/lead protrusion: MF-RHT500 ~ MF-RHT1300		C <sub>1</sub>		max.	
Overall width wid lead protrusion: MP-HH1300 $C_2$ $(2.126)$ max.Lead protrusion $l_1$ $L_1$ $1.0$ $(0.39)$ max.Protrusion of cutout $L$ $L$ $\frac{11}{(.433)}$ max.Protrusion beyond hold-down tape $l_2$ $l_2$ Not specifiedSprocket hole pitch $P_0$ $P_0$ $\frac{12.7}{(0.5)}$ $\frac{\pm 0.3}{(\pm 0.12)}$ Pitch tolerance $20$ consecutive $\frac{\pm 1}{(\pm 0.39)}$ $\frac{\pm 1.0}{(\pm 0.24)}$ $\frac{\pm 0.6}{(1.0)}$ Device pitch $\frac{25.4}{(1.0)}$ $\pm 0.6}{(1.0)}$ $\frac{\pm 0.6}{(1.00)}$ max.Tape thickness with splice: MF-RHT050 ~ MF-RHT200 $t_1$ $\frac{1.5}{(.059)}$ max.Tape thickness with splice: MF-RHT050 ~ MF-RHT1300 $t_1$ $\frac{2.3}{(.091)}$ max.Splice sprocket hole alignment $\frac{4.0}{(.157)}$ $\frac{\pm 0.2}{(±.008)}$ Body lateral deviation $\Delta_h$ $\Delta_h$ $0$ $\frac{\pm 1}{(\pm 0.39)}$ Body tape plane deviation $\Delta_p$ $\Lambda_p$ $0$ $\frac{\pm 0.3}{(\pm 0.12)}$ Orringte to argingte	Overall width w/o lead protrusion: MF-RHT050 ~ MF-RHT450		<i>C</i> <sub>2</sub>		max.	
Lead protrusion $l_1$ $L_1$ $\overline{(0.39)}$ max.Protrusion of cutoutLL $\frac{11}{(.433)}$ max.Protrusion beyond hold-down tape $l_2$ $l_2$ Not specifiedSprocket hole pitch $P_0$ $P_0$ $\frac{12.7}{(0.5)}$ $\frac{\pm 0.3}{(\pm .012)}$ Pitch tolerance $20$ consecutive $\frac{\pm 1}{(\pm .039)}$ $\frac{\pm 0.7}{(0.5)}$ $\frac{\pm 0.6}{(\pm .024)}$ Device pitch $\frac{25.4}{(1.0)}$ $\frac{\pm 0.6}{(\pm .024)}$ $\frac{25.4}{(1.0)}$ $\frac{\pm 0.6}{(\pm .024)}$ Tape thicknesstt $\frac{0.9}{(.035)}$ max.Tape thickness with splice: MF-RHT050 ~ MF-RHT200 $t_1$ $\frac{1.5}{(.059)}$ max.Splice sprocket hole alignment $\frac{4.0}{(.157)}$ $\frac{\pm 0.2}{(\pm .008)}$ Body lateral deviation $\Delta_h$ $\Delta_h$ $0$ $\frac{\pm 1}{(\pm .039)}$ Body tape plane deviation $\Delta_p$ $\Delta_p$ $0$ $\frac{\pm 0.07}{(\pm .012)}$ Orringta to adjacent component lead $P_d$ $P_d$ $P_d$ $\frac{3.81}{(\pm .012)}$	Overall width w/o lead protrusion: MF-RHT500 ~ MF-RHT1300		<i>C</i> <sub>2</sub>		max.	
Protrusion of clubitLL $\overline{(.433)}$ Imax.Protrusion beyond hold-down tape $l_2$ $l_2$ Not specifiedSprocket hole pitch $P_0$ $P_0$ $\frac{12.7}{(0.5)}$ $\frac{\pm 0.3}{(\pm .012)}$ Pitch tolerance20 consecutive $\frac{\pm 1}{(\pm .039)}$ Device pitch $\frac{25.4}{(1.0)}$ $\frac{\pm 0.6}{(1.0)}$ Tape thickness $t$ $t$ $\frac{0.9}{(.035)}$ Tape thickness with splice: MF-RHT050 ~ MF-RHT200 $t_1$ $\frac{2.3}{(.059)}$ Tape thickness with splice: MF-RHT300 ~ MF-RHT1300 $t_1$ $\frac{2.3}{(.091)}$ Splice sprocket hole alignment $\frac{4.0}{(.157)}$ $\frac{\pm 0.2}{(t.008)}$ Body lateral deviation $\Delta_h$ $\Delta_p$ $0$ $\frac{\pm 1}{(t.039)}$ Cordinate to adjacent component lead $P_d$ $P_d$ $\frac{3.81}{(t.012)}$	Lead protrusion	I <sub>1</sub>	L <sub>1</sub>		max.	
Sprocket hole pitch $P_0$ $P_0$ $\frac{12.7}{(0.5)}$ $\frac{\pm 0.3}{(\pm .012)}$ Pitch tolerance $20$ consecutive $\frac{\pm 1}{(\pm .039)}$ Device pitch $\frac{25.4}{(1.0)}$ $\frac{\pm 0.6}{(\pm .024)}$ Tape thickness $t$ $t$ $\frac{0.9}{(.035)}$ Tape thickness with splice: MF-RHT050 ~ MF-RHT200 $t_1$ $\frac{1.5}{(.059)}$ Tape thickness with splice: MF-RHT300 ~ MF-RHT1300 $t_1$ $\frac{2.3}{(.091)}$ Splice sprocket hole alignment $\frac{4.0}{(.157)}$ $\frac{\pm 0.2}{(\pm .008)}$ Body lateral deviation $\Delta_h$ $\Delta_h$ $0$ $\frac{\pm 1}{(\pm .039)}$ Cordinate to adjacent component lead $P_d$ $P_d$ $\frac{3.81}{(\pm .012)}$	Protrusion of cutout	L	L		max.	
Sprocket nole pitch $P_0$ $P_0$ $\overline{(0.5)}$ $\overline{(\pm.012)}$ Pitch tolerance $20 \text{ consecutive}$ $\frac{\pm 1}{(\pm.039)}$ Device pitch $\frac{25.4}{(1.0)}$ $\frac{\pm 0.6}{(\pm.024)}$ Tape thickness $t$ $t$ $\frac{0.9}{(.035)}$ Tape thickness with splice: MF-RHT050 ~ MF-RHT200 $t_1$ $\frac{1.5}{(.059)}$ Tape thickness with splice: MF-RHT300 ~ MF-RHT1300 $t_1$ $\frac{2.3}{(.091)}$ Splice sprocket hole alignment $\frac{4.0}{(.157)}$ $\frac{\pm 0.2}{(\pm.008)}$ Body lateral deviation $\Delta_h$ $\Delta_h$ $0$ $\frac{\pm 1}{(\pm.039)}$ Device plane deviation $\Delta_p$ $\Delta_p$ $0$ $\frac{\pm 0.3}{(\pm.012)}$ Orringte to adjacent component lead $P_d$ $P_d$ $\frac{3.81}{(\pm.012)}$ $\pm 0.07$	Protrusion beyond hold-down tape	1 <sub>2</sub>	1 <sub>2</sub>	Not specified		
Price bierance20 consecutive $(\pm.039)$ Device pitch $\frac{25.4}{(1.0)}$ $\frac{\pm 0.6}{(\pm.024)}$ Tape thicknesstt $\frac{0.9}{(.035)}$ max.Tape thickness with splice: MF-RHT050 ~ MF-RHT200 $t_1$ $\frac{1.5}{(.059)}$ max.Tape thickness with splice: MF-RHT300 ~ MF-RHT1300 $t_1$ $\frac{2.3}{(.091)}$ max.Splice sprocket hole alignment $\frac{4.0}{(.157)}$ $\frac{\pm 0.2}{(\pm.008)}$ Body lateral deviation $\Delta_h$ $\Delta_h$ 0 $\frac{\pm 1}{(\pm.039)}$ Body tape plane deviation $\Delta_p$ $\Delta_p$ $0$ $\frac{\pm 0.3}{(\pm.012)}$ Orrinate to adjacent component lead $P_4$ $P_4$ $\frac{3.81}{3.81}$ $\pm 0.07$	Sprocket hole pitch	P <sub>0</sub>	P <sub>0</sub>			
Device pice $\overline{(1.0)}$ $\overline{(\pm.024)}$ Tape thickness $t$ $t$ $\frac{0.9}{(.035)}$ max.Tape thickness with splice: MF-RHT050 ~ MF-RHT200 $t_1$ $\frac{1.5}{(.059)}$ max.Tape thickness with splice: MF-RHT300 ~ MF-RHT1300 $t_1$ $\frac{2.3}{(.091)}$ max.Splice sprocket hole alignment $\frac{4.0}{(.157)}$ $\frac{\pm 0.2}{(\pm.008)}$ Body lateral deviation $\Delta_h$ $\Delta_h$ $0$ $\frac{\pm 1}{(\pm.039)}$ Body tape plane deviation $\Delta_p$ $\Delta_p$ $0$ $\frac{\pm 0.3}{(\pm.012)}$ Orringte to adjacent component lead $P_t$ $P_t$ $\frac{3.81}{3.81}$ $\pm 0.07$	Pitch tolerance			20 consecutive		
Tape thicknessttttmax.Tape thickness with splice: MF-RHT050 ~ MF-RHT200 $t_1$ $\frac{1.5}{(.059)}$ max.Tape thickness with splice: MF-RHT300 ~ MF-RHT1300 $t_1$ $\frac{2.3}{(.091)}$ max.Splice sprocket hole alignment $\frac{4.0}{(.157)}$ $\frac{\pm 0.2}{(\pm .008)}$ Body lateral deviation $\Delta_h$ $\Delta_h$ 0 $\frac{\pm 1}{(\pm .039)}$ Body tape plane deviation $\Delta_p$ $\Delta_p$ $\Delta_p$ 0Ordinate to adjacent component lead $P_4$ $\frac{3.81}{(\pm .017)}$ $\frac{\pm 0.07}{(\pm .007)}$	Device pitch					
Tape thickness with splice: MF-RHT050 ~ MF-RHT200 $t_1$ $\frac{1.5}{(.059)}$ max.Tape thickness with splice: MF-RHT300 ~ MF-RHT1300 $t_1$ $\frac{2.3}{(.091)}$ max.Splice sprocket hole alignment $\frac{4.0}{(.157)}$ $\frac{\pm 0.2}{(\pm .008)}$ Body lateral deviation $\Delta_h$ $\Delta_h$ 0 $\frac{\pm 1}{(\pm .039)}$ Body tape plane deviation $\Delta_p$ $\Delta_p$ $\Delta_p$ $0$ Ordinate to adjacent component lead $P_4$ $P_4$ $\frac{3.81}{.07}$	Tape thickness	t	t		max.	
Tape thickness with splice. MI-FRITISOD $\sim$ M	Tape thickness with splice: MF-RHT050 ~ MF-RHT200		t <sub>1</sub>	<u>1.5</u> (.059)	max.	
Splice sprocket note alignment $\overline{(.157)}$ $\overline{(\pm.008)}$ Body lateral deviation $\Delta_h$ $\Delta_h$ 0 $\frac{\pm 1}{(\pm.039)}$ Body tape plane deviation $\Delta_p$ $\Delta_p$ 0 $\frac{\pm 0.3}{(\pm.012)}$ Ordinate to adjacent component lead $P_d$ $P_d$ $\frac{3.81}{2.07}$ $\frac{\pm 0.07}{2.07}$	Tape thickness with splice: MF-RHT300 ~ MF-RHT1300		t <sub>1</sub>		max.	
Body lateral deviation $\Delta_h$ $\Delta_h$ 0 $\frac{\pm 1}{(\pm .039)}$ Body tape plane deviation $\Delta_p$ $\Delta_p$ 0 $\frac{\pm 0.3}{(\pm .012)}$ Ordinate to adjacent component lead $P_d$ $P_d$ $\frac{3.81}{$	Splice sprocket hole alignment					
Body tape plane deviation $\Delta_p$ $\Delta_p$ $0$ $\frac{\pm 0.3}{(\pm .012)}$	Body lateral deviation	$\Delta_h$	$\Delta_h$		±1	
Ordinate to adjacent component lead $P_{i}$ $P_{j}$ $\frac{3.81}{\pm 0.07}$	Body tape plane deviation	$\Delta_{p}$	$\Delta_{p}$	0	±0.3	
	Ordinate to adjacent component lead	P <sub>1</sub>	P <sub>1</sub>		±0.07	

# **MF-RHT Series Tape and Reel Specifications**

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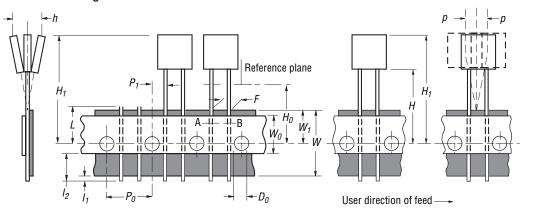
MM (INCHES)

DIMENSIONS:

	IEC	EIA	Dim	Dimensions		
Dimension Description	Mark	Mark	Dimensions	Tolerance		
Lead spacing: MF-RHT050 ~ MF-RHT900	F	F	5.08 (0.2)	-0.2/+0.8 (-0.006/+0.031)		
_ead spacing: MF-RHT1000 ~ MF-RHT1300	F	F	10.2 (0.402)	-0.2/+0.8 (-0.006/+0.031)		
Reel width: MF-RHT050 ~ MF-RHT450	W	W2	<u>56</u> (2.20)	max.		
Reel width: MF-RHT500 ~ MF-RHT1300	W	W2	<u>63.5</u> (2.50)	max.		
Reel diameter	d	а	<u>370.0</u> (14.57)	max.		
Space between flanges less device	W <sub>1</sub>	h	4.75 (.187)	<u>±3.25</u> (±.128)		
Arbor hole diameter	f	С	<u>26.0</u> (1.02)	<u>±12.0</u> (±.472)		
Core diameter	h	п	80.0 (3.15)	max.		
Зох			$\frac{62}{(2.44)} \frac{355}{(14.0)} \frac{345}{(13.12)}$			
Consecutive missing places			3	max.		
Empty places per reel			Not specified			

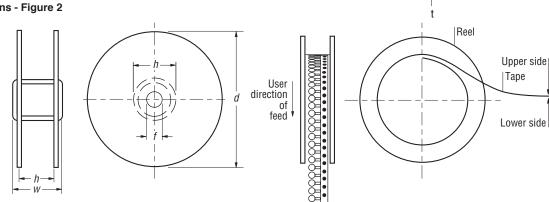
#### **Taped Component Dimensions - Figure 1**

h



Cross section A - B

#### **Reel Dimensions - Figure 2**



Specifications are subject to change without notice. Users should verify actual device performance in their specific applications.

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# Bourns® Multifuse® PPTC Resettable Fuses

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- Users are responsible for independent and adequate evaluation of Bourns<sup>®</sup> Multifuse<sup>®</sup> Polymer PTC devices in the user's application, including the PPTC device characteristics stated in the applicable data sheet.
- Polymer PTC devices must not be allowed to operate beyond their stated maximum ratings. Operation in excess of such
  maximum ratings could result in damage to the PTC device and possibly lead to electrical arcing and/or fire. Circuits with
  inductance may generate a voltage above the rated voltage of the polymer PTC device and should be thoroughly evaluated
  within the user's application during the PTC selection and qualification process.
- Polymer PTC devices are intended to protect against adverse effects of temporary overcurrent or overtemperature conditions up to rated limits and are not intended to serve as protective devices where overcurrent or overvoltage conditions are expected to be repetitive or prolonged.
- In normal operation, polymer PTC devices experience thermal expansion under fault conditions. Thus, a polymer PTC device must be protected against mechanical stress, and must be given adequate clearance within the user's application to accommodate such thermal expansion. Rigid potting materials or fixed housings or coverings that do not provide adequate clearance should be thoroughly examined and tested by the user, as they may result in the malfunction of polymer PTC devices if the thermal expansion is inhibited.
- Exposure to lubricants, silicon-based oils, solvents, gels, electrolytes, acids, and other related or similar materials may adversely affect the performance of polymer PTC devices.
- Aggressive solvents may adversely affect the performance of polymer PTC devices. Conformal coating, encapsulating, potting, molding, and sealing materials may contain aggressive solvents including but not limited to xylene and toluene, which are known to cause adverse effects on the performance of polymer PTCs. Such aggressive solvents must be thoroughly cured or baked to ensure their complete removal from polymer PTCs to minimize the possible adverse effect on the device.
- Recommended storage conditions should be followed at all times. Such conditions can be found on the applicable data sheet and on the Multifuse<sup>®</sup> Polymer PTC Moisture/Reflow Sensitivity Classification (MSL) note: <u>https://www.bourns.com/docs/RoHS-MSL/msl\_mf.pdf</u>

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