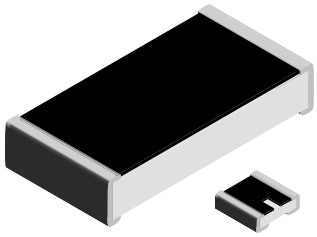
Thick Film Chip Resistors, Military/Established Reliability MIL-PRF-55342 Qualified, Type RM



FEATURES

- Fully conforms to the requirements of MIL-PRF-55342
- Established reliability - Verified failure rate; M, P, R, S and T levels
- Operating temperature range is - 55 °C to + 150 °C
- 100 % Group A screening per MIL-PRF-55342
- Termination Style B - Tin/Lead wraparound over nickel barrier
- For MIL-PRF-32159 zero ohm jumpers, see Vishay Dale's RCWPM Jumper (Military M32159) data sheet

STANDARD ELECTRICAL SPECIFICATIONS

VISHAY DALE MODEL	MIL-PRF-55342 STYLE	MIL SPEC. SHEET	TERM.	POWER RATING $P_{70\,°C}$ W	MAX. OPERATING VOLTAGE	CHAR.	TOLERANCE %	RESISTANCE RANGE Ω
RCWPM-0502	RM0502	01	B	0.05	40	M K, M	± 2 to ± 10 ± 1 to ± 10	1 to 9.1 10 to 22M
RCWPM-550	RM0505	02	B	0.125	40	M K, M	± 2 to ± 10 ± 1 to ± 10	1 to 9.1 10 to 22M
RCWPM-5100	RM1005	03	B	0.20	75	M K, M	± 2 to ± 10 ± 1 to ± 10	1 to 5.6 5.62 to 22M
RCWPM-5150	RM1505	04	B	0.15	125	M K, M	± 2 to ± 10 ± 1 to ± 10	1 to 5.6 5.62 to 22M
RCWPM-7225	RM2208	05	B	0.225	175	M K, M	± 2 to ± 10 ± 1 to ± 10	1 to 5.6 5.62 to 22M
RCWPM-575	RM0705	06	B	0.15	50	M K, M	± 2 to ± 10 ± 1 to ± 10	1 to 5.6 5.62 to 22M
RCWPM-1206	RM1206	07	B	0.25	100	M K, M	± 2 to ± 10 ± 1 to ± 10	1 to 5.6 5.62 to 22M
RCWPM-2010	RM2010	08	B	0.80	150	M K, M	± 2 to ± 10 ± 1 to ± 10	1 to 5.6 5.62 to 22M
RCWPM-2512	RM2512	09	B	1.0	200	M K, M	± 2 to ± 10 ± 1 to ± 10	1 to 5.6 5.62 to 22M
RCWPM-1100	RM1010	10	B	0.50	75	M K, M	± 2 to ± 10 ± 1 to ± 10	1 to 5.6 5.62 to 22M
RCWPM-0402	RM0402	11	B	0.05	30	M K, M	± 2 to ± 10 ± 1 to ± 10	1 to 9.1 10 to 22M
RCWPM-0603	RM0603	12	B	0.10	50	M K, M	± 2 to ± 10 ± 1 to ± 10	1 to 5.6 5.62 to 22M
RCWPM-0302	RM0302	13	B	0.04	15	M K, M	± 2 to ± 10 ± 1 to ± 10	1 to 9.1 10 to 22M

Note

- DSCC has created a series of drawings to support the need for 0201-sized product. Vishay Dale is listed as a resource on these drawing as follows:

DSCC DRAWING NUMBER	VISHAY DALE MODEL	TERM.	POWER RATING $P_{70\,°C}$ W	RES. RANGE Ω	RES. TOL. %	TEMP. COEF. ppm/°C	MAX. WORKING VOLTAGE
07009	RCWP-0201	B	0.05	47 to 1M 10 to 1M	± 1; ± 5	100 200	30
07010	RCWP-0201	B	0.05	47 to 1M 10 to 1M	± 1; ± 5	100 300	30

These drawings can be viewed at: www.dscc.dla.mil/Programs/MilSpec/listDwgs.asp?DocType=DSCCdwg

GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: M55342M02B10E0RWB (preferred part number format)

M	5	5	3	4	2	M	0	2	B	1	0	E	0	R	W	B	

MIL STYLE	CHARACTERISTICS	SPEC SHEET	TERMINATION STYLE	VALUE AND TOLERANCE	FAILURE RATE	PACKAGING	SPECIAL
D55342 applies to Style 07 (RM1206) only. **M55342** applies to all other styles.	**K** = 100 ppm **M** = 300 ppm	(see Standard Electrical Specifications table)	**B** = Pre-tinned Nickel Barrier, wraparound	(see Tolerance and Multipliers table)	**C** = Non-ER **M** = 1.0 %/1000 h **P** = 0.1 %/1000 h **R** = 0.01 %/1000 h **S** = 0.001 %/1000 h **T** = Space Level	**TP** = Tin/Lead, T/R (Full) **UL** = Tin/Lead, T/R Single Lot Date Code **S3** = Tin/Lead, T/R (1000 pieces) **WB** = Tin/Lead, Tray **WL** = Tin/Lead, Tray, Single Lot Date Code **S2** = Tin/Lead, T/R (500 pieces) **S6** = Tin/Lead, T/R (300 pieces)	Blank = Standard (Dash Number) (up to 1 digits) **T** = Space Level (-98)

Historical Part Numbering: M55342M02B10E0R (will continue to be accepted)

M55342	M	02	B	10E0	R	WB
MIL STYLE	CHARACTERISTICS	SPEC SHEET	TERMINATION STYLE	VALUE AND TOLERANCE	FAILURE RATE	PACKAGING CODE

RESISTANCE TOLERANCE AND MULTIPLIERS

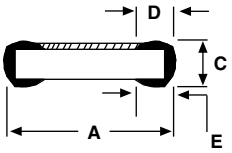
TOLERANCE				MULTIPLIER	VALUE RANGE (Ω)
± 1 %	**± 2 %**	**± 5 %**	**± 10 %**		
D	G	J	M	1	1 - 9xx
E	H	K	N	1000	1K - 9xxK
F	T	L	P	1 000 000	1M - 22M

Examples:

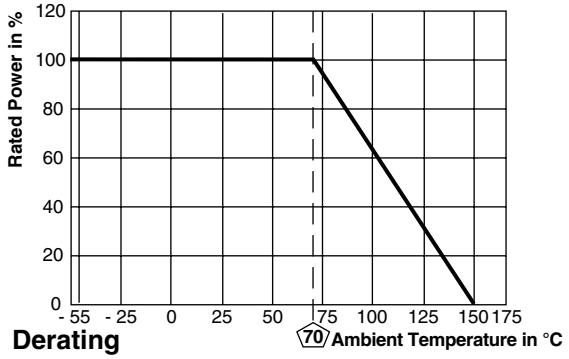
11D3 = 11.3 Ω ± 1 %
10E0 = 10 kΩ ± 1 %
332D = 332 Ω ± 1 %
2F21 = 2.21 MΩ ± 1 %
51G0 = 51 Ω ± 2 %
10H0 = 10 kΩ ± 2 %
33H0 = 33 kΩ ± 2 %
22T0 = 22 MΩ ± 2 %

15J0 = 15 Ω ± 5 %
10K0 = 10 kΩ ± 5 %
560K = 560 kΩ ± 5 %
8L20 = 8.2 MΩ ± 5 %
10M0 = 10 Ω ± 10 %
10N0 = 10 kΩ ± 10 %
2P70 = 2.7 MΩ ± 10 %
8P20 = 8.2 MΩ ± 10 %

DIMENSIONS in inches [millimeters]



VISHAY DALE MODEL	MIL-PRF-55342 STYLE	MIL. SPEC. SHEET	A (Length)	B (Width)	C (Height)	D (Top Term)	E (Bottom Term)
RCWPM-0502	RM0502	01	0.055 ± 0.005 [1.40 ± 0.13]	0.023 ± 0.003 [0.58 ± 0.08]	0.015 ± 0.003 [0.38 ± 0.08]	0.010 ± 0.005 [0.25 ± 0.13]	0.015 ± 0.005 [0.38 ± 0.13]
RCWPM-550	RM0505	02	0.055 ± 0.005 [1.40 ± 0.13]	0.050 ± 0.005 [1.27 ± 0.13]	0.020 ± 0.005 [0.51 ± 0.13]	0.010 ± 0.005 [0.25 ± 0.13]	0.015 ± 0.005 [0.38 ± 0.13]
RCWPM-5100	RM1005	03	0.105 ± 0.005 [2.67 ± 0.13]	0.050 ± 0.005 [1.27 ± 0.13]	0.020 ± 0.005 [0.51 ± 0.13]	0.015 ± 0.005 [0.38 ± 0.13]	0.015 ± 0.005 [0.38 ± 0.13]
RCWPM-5150	RM1505	04	0.155 ± 0.005 [3.94 ± 0.13]	0.050 ± 0.005 [1.27 ± 0.13]	0.020 ± 0.005 [0.51 ± 0.13]	0.015 ± 0.005 [0.38 ± 0.13]	0.015 ± 0.005 [0.38 ± 0.13]
RCWPM-7225	RM2208	05	0.230 ± 0.005 [5.84 ± 0.13]	0.075 ± 0.005 [1.91 ± 0.13]	0.020 ± 0.005 [0.51 ± 0.13]	0.020 ± 0.005 [0.51 ± 0.13]	0.020 ± 0.005 [0.51 ± 0.13]
RCWPM-575	RM0705	06	0.080 ± 0.005 [2.03 ± 0.13]	0.050 ± 0.005 [1.27 ± 0.13]	0.020 ± 0.005 [0.51 ± 0.13]	0.015 ± 0.005 [0.38 ± 0.13]	0.015 ± 0.005 [0.38 ± 0.13]
RCWPM-1206	RM1206	07	0.125 ± 0.005 [3.18 ± 0.13]	0.063 ± 0.005 [1.60 ± 0.13]	0.020 ± 0.005 [0.51 ± 0.13]	0.015 ± 0.005 [0.38 ± 0.13]	0.015 ± 0.005 [0.38 ± 0.13]
RCWPM-2010	RM2010	08	0.197 ± 0.006 [5.00 ± 0.15]	0.098 ± 0.005 [2.49 ± 0.13]	0.020 ± 0.005 [0.51 ± 0.13]	0.020 ± 0.005 [0.51 ± 0.13]	0.020 ± 0.005 [0.51 ± 0.13]
RCWPM-2512	RM2512	09	0.250 ± 0.006 [6.35 ± 0.15]	0.124 ± 0.005 [3.15 ± 0.13]	0.020 ± 0.005 [0.51 ± 0.13]	0.020 ± 0.005 [0.51 ± 0.13]	0.020 ± 0.005 [0.51 ± 0.13]
RCWPM-1100	RM1010	10	0.105 ± 0.005 [2.67 ± 0.13]	0.100 ± 0.005 [2.54 ± 0.13]	0.020 ± 0.005 [0.51 ± 0.13]	0.015 ± 0.005 [0.38 ± 0.13]	0.015 ± 0.005 [0.38 ± 0.13]
RCWPM-0402	RM0402	11	0.039 ± 0.003 [0.99 ± 0.08]	0.020 ± 0.003 [0.51 ± 0.08]	0.013 ± 0.003 [0.33 ± 0.08]	0.010 ± 0.005 [0.25 ± 0.13]	0.010 ± 0.005 [0.25 ± 0.13]
RCWPM-0603	RM0603	12	0.063 ± 0.005 [1.60 ± 0.13]	0.032 ± 0.005 [0.81 ± 0.13]	0.018 ± 0.005 [0.46 ± 0.13]	0.012 ± 0.005 [0.31 ± 0.13]	0.015 ± 0.005 [0.38 ± 0.13]
RCWPM-0302	RM0302	13	0.034 ± 0.004 [0.86 ± 0.10]	0.021 ± 0.003 [0.53 ± 0.08]	0.015 ± 0.003 [0.38 ± 0.08]	0.007 ± 0.005 [0.18 ± 0.13]	0.008 ± 0.005 [0.20 ± 0.13]
RCWP-0201			0.024 ± 0.002 [0.60 ± 0.05]	0.012 ± 0.002 [0.30 ± 0.05]	0.009 ± 0.002 [0.23 ± 0.05]	0.006 ± 0.003 [0.15 ± 0.07]	0.006 + 0.002 - 0.004 [0.15 + 0.05 - 0.10]



CAGE CODE: 91637 and SH903

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