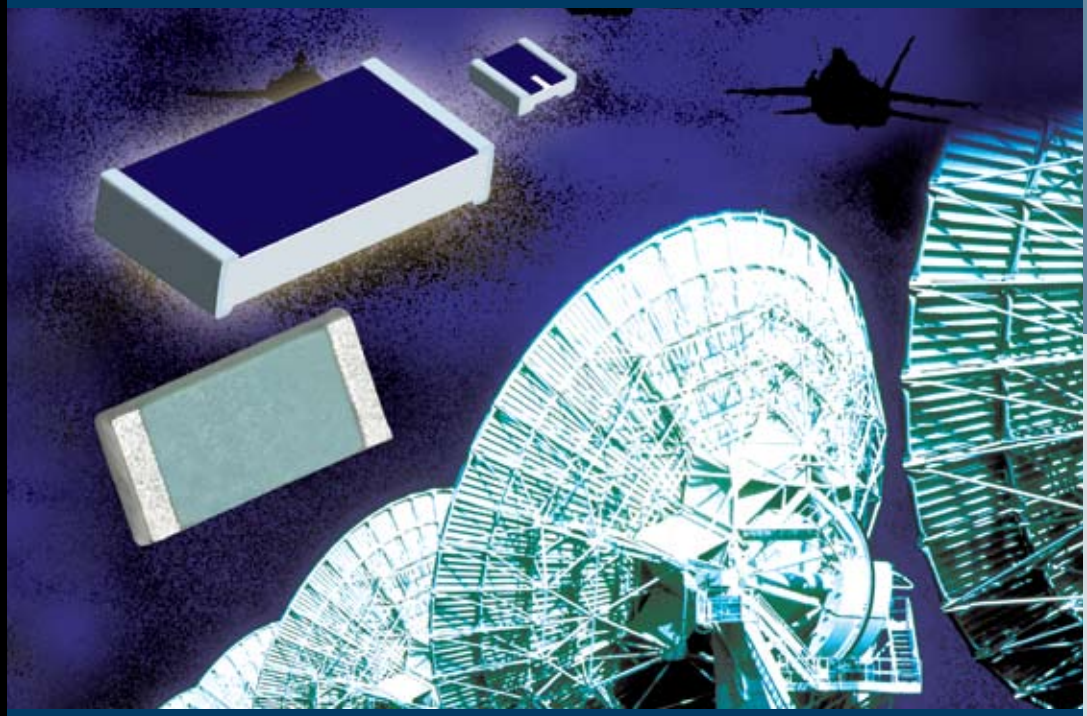
VISHAY INTERTECHNOLOGY, INC.

RESISTIVE PRODUCTS

SELECTOR GUIDE



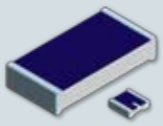
MILITARY FILM SMD RESISTORS

KEY BENEFITS

- A wide range of power ratings (0.04 W to 1 W)
- A wide resistance range (1 Ω to 22 Ω)
- Low/high temperature performance (- 65 °C to + 150 °C)
- Highly-stable Thick Film and Thin Film constructions
- Very low noise
- Resistors – MIL-PRF-55342 qualified
- 100 % screen tested per group A

For technical questions, contact ff2aresistors@vishay.com (Asia and Americas), ff1resistors@vishay.com (Europe)

MILITARY FILM SMD RESISTORS

Military Specification	Model	Wattage Rating (W)	Charac-teristic	Resistance Range	Tolerance	Part Number Definition
Established Reliability						
MIL-PRF-55342 [Thick Film] 	RM0502: /01 (RCWPM-0502)	0.05	M	1 Ω – 9.1 Ω	± 2 to ± 10	**M55342 M 02 B 10E0 R** **1 2 3 4 5 6** **1: M55342** MIL. spec. no. indicating MIL-PRF-55342 **D55342** for RM1206 **2: M** Characteristic M = ± 300 ppm/°C K = ± 100 ppm/°C **3: 02** MIL. Spec. sheet number **4: B** Termination material B = Pre-tinned nickel barrier, wraparound **5: 10E0** Resistance and Tolerance **6: R** Failure rate level (reference current MIL-PRF-55342 QPL list)
			K, M	10 Ω – 22 MΩ	± 1 to ± 10	
	RM0505: /02 (RCWPM-550)	0.125	M	1 Ω – 9.1 Ω	± 2 to ± 10	
			K, M	10 Ω – 22 MΩ	± 1 to ± 10	
	RM1005: /03 (RCWPM-5100)	0.20	M	1 Ω – 5.6 Ω	± 2 to ± 10	
			K, M	5.62 Ω – 22 MΩ	± 1 to ± 10	
	RM1505: /04 (RCWPM-5150)	0.15	M	1 Ω – 5.6 Ω	± 2 to ± 10	
			K, M	5.62 Ω – 22 MΩ	± 1 to ± 10	
	RM2208: /05 (RCWPM-7225)	0.225	M	1 Ω – 5.6 Ω	± 2 to ± 10	
			K, M	5.62 Ω – 22 MΩ	± 1 to ± 10	
	RM0705: /06 (RCWPM-575)	0.15	M	1 Ω – 5.6 Ω	± 2 to ± 10	
			K, M	5.62 Ω – 22 MΩ	± 1 to ± 10	
	RM1206: /07 (RCWPM-1206)	0.25	M	1 Ω – 5.6 Ω	± 2 to ± 10	
			K, M	5.62 Ω – 22 MΩ	± 1 to ± 10	
	RM2010: /08 (RCWPM-2010)	0.80	M	1 Ω – 5.6 Ω	± 2 to ± 10	
			K, M	5.62 Ω – 22 MΩ	± 1 to ± 10	
	RM2512: /09 (RCWPM-2512)	1.0	M	1 Ω – 5.6 Ω	± 2 to ± 10	
			K, M	5.62 Ω – 22 MΩ	± 1 to ± 10	
	RM1010: /10 (RCWPM-1100)	0.50	M	1 Ω – 5.6 Ω	± 2 to ± 10	
			K, M	5.62 Ω – 22 MΩ	± 1 to ± 10	
	RM0402: /11 (RCWPM-0402)	0.05	M	1 Ω – 9.1 Ω	± 2 to ± 10	
			K, M	10 Ω – 22 M	± 1 to ± 10	
	RM0603: /12 (RCWPM-0603)	0.10	M	1 Ω – 5.6 Ω	± 2 to ± 10	
			K, M	5.62 Ω – 22 MΩ	± 1 to ± 10	
	RM0302: /13 (RCWPM-0302)	0.04	M	1 Ω – 9.1 Ω	± 2 to ± 10	
			K, M	10 Ω – 22 MΩ	± 1 to ± 10	

Tolerance					Multiplier	Value Range
± 0.1 %	± 1 %	± 2 %	± 5 %	± 10 %		
A	D	G	J	M	1	1 Ω - 9xx Ω
B	E	H	K	N	1,000	1 kΩ - 9xx kΩ
C	F	T	L	P	1,000,000	1 MΩ -9xx MΩ

Examples:

54A2 = 54.2 Ω ± 0.1 %
20B0 = 20 kΩ ± 0.1 %
965A = 965 Ω ± 0.1 %
2C03 = 2.03 MΩ ± 0.1 %

11D3 = 11.3 Ω ± 1 %
10E0 = 10 kΩ ± 1 %
332D = 332 Ω ± 1 %
2F21 = 2.21 MΩ ± 1 %
51G0 = 51 Ω ± 2 %
10H0 = 10 Ω ± 2 %
33H0 = 33 kΩ ± 2 %
2T20 = 2.2 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 %

Military Specification	Model	Wattage Rating	Charac-teristic	Resistance Range	Tolerance	Part Number Definition
Established Reliability						
MIL-PRF-55342 [Thin Film] 	RM0502: /01 (M55342/01)	0.05	E	49.9 – 150 k	± 0.1 to ± 5	**M55342 E 06 B 10B0 R** **1 2 3 4 5 6** **1: M55342** MIL. spec. no. indicating MIL-PRF-55342 **D55342** for RM1206 **2: E** Characteristic M = ± 300 ppm/°C K = ± 100 ppm/°C H = ± 50 ppm/°C E = ± 25 ppm/°C **3: 06** MIL. Spec. sheet number **4: B** Termination material B = Pre-tinned nickel barrier, wraparound **5: 10B0** Resistance and Tolerance **6: R** Failure rate level (reference current MIL-PRF-55342 QPL list)
			H, K, M	20 – 150 k	± 0.1 to ± 5	
	RM0505: /02 (M55342/02)	0.125	E	49.9 – 301 k	± 0.1 to ± 5	
			H, K, M	20 – 301 k	± 0.1 to ± 5	
	RM1005: /03 (M55342/03)	0.20	E	49.9 – 649 k	± 0.1 to ± 5	
			H, K, M	10 – 649 k	± 0.1 to ± 5	
	RM1505: /04 (M55342/04)	0.15	E	49.9 – 1.69 M	± 0.1 to ± 5	
			H, K, M	10 – 1.69 M	± 0.1 to ± 5	
	RM2208: /05 (M55342/05)	0.225	E	100 – 3.16 M	± 0.1	
			E	49.9 – 3.16 M	± 1 to ± 5	
			H, K, M	10 – 3.16M	± 0.1 to ± 5	
	RM0705: /06 (M55342/06)	0.15	E	49.9 – 475 k	± 0.1 to ± 5	
			H, K, M	10 – 475 k	± 0.1 to ± 5	
	RM1206: /07 (D55342/07)	0.25	E	49.9 – 1.5 M	± 0.1 to ± 5	
			H, K, M	10 – 1.5 M	± 0.1 to ± 5	
	RM2010: /08 (M55342/08)	0.80	E, H, K, M	100 – 4.02 M	± 0.1	
			E	49.9 – 4.02 M	± 1 to ± 5	
			H, K, M	10 – 4.02 M	± 1 to ± 5	
	RM2512: /09 (M55342/09)	1.0	E, H, K, M	100 – 6.19 M	± 0.1	
			E	49.9 – 6.19 M	± 1 to ± 5	
			H, K, M	10 – 6.19 M	± 1 to ± 5	
	RM1010: /10 (M55342/10)	0.50	E, H, K, M	49.9 – 1 M	± 0.1 to ± 5	
	RM0402: /11 (M55342/11)	0.05	E	49.9 – 100 k	± 0.1 to ± 5	
			H, K, M	20 – 100 k	± 0.1 to ± 5	
	RM0603: /12 (M55342/12)	0.10	E	49.9 – 258 k	± 0.1	
			E	49.9 – 261 k	± 1 to ± 5	
			H, K, M	10 – 258 k	± 0.1	
			H, K, M	10 – 261 k	± 1 to ± 5	

Military Zero Ohm Jumper Drawings	Vishay Dale Model	Vishay Thin Film Model	Maximum Resistance (mΩ)	Part Number Definition
87011	RCWPM-1100-99	M-1010X	20	**94011-B** **1 2** **1: 94011** MIL. drawing no. **2: B** Termination material B = Pre-tinned nickel barrier, wraparound
88032	RCWPM-0502-99		20	
90047	RCWPM-7225-99	M-2208X	40	
90048	RCWPM-575-99	M-0805X	20	
90049	RCWPM-5100-99	M-1005X	30	
90092	RCWPM-5150-99	M-1505X	40	
94011	RCWPM-1206-99	M-1206X	20	
03002	RCWPM-550-99	M-0505X	25	
03011	RCWPM-0201-99		50	
03012	RCWPM-0302-99		20	
03013	RCWPM-0603-99	M-0603X	25	
03014	RCWPM-0402-99	M-0402X	25	
03015	RCWPM-2010-99	M-2010X	40	
03016	RCWPM-2512-99	M-2512X	40	

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