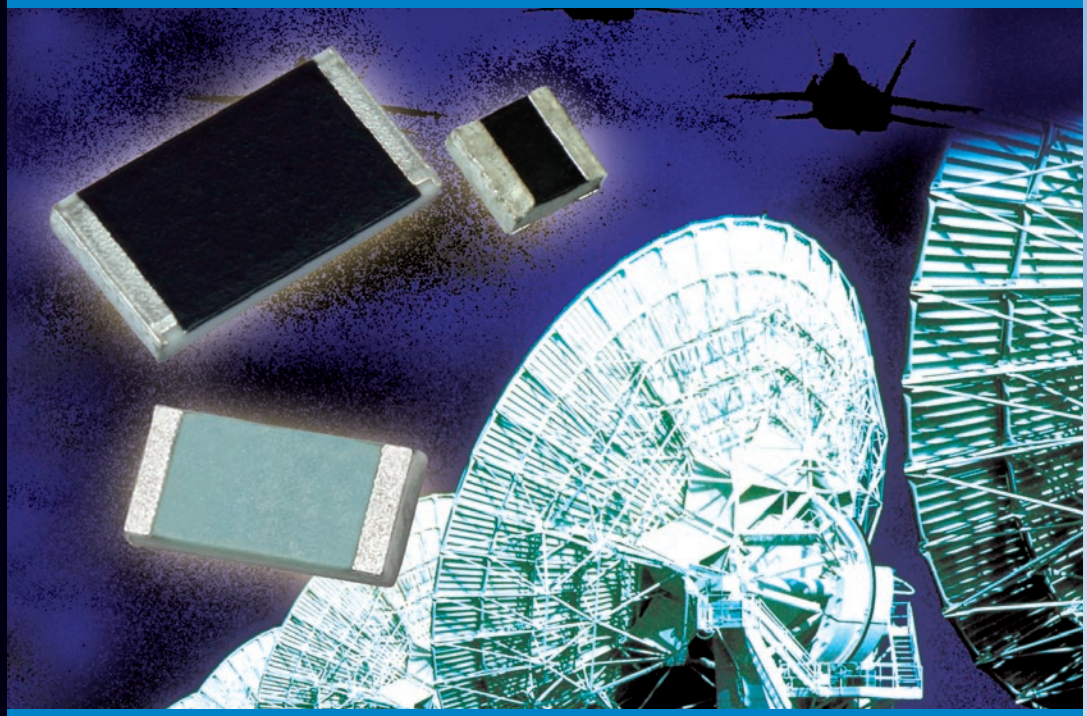
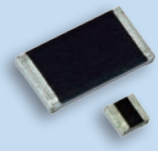
MILITARY FILM SMD RESISTORS

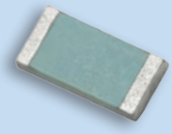


FEATURES

- 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 construction
- Very low noise
- Resistors – MIL-PRF-55342 qualified
- Jumpers - MIL-PRF-32159 qualified
- 100 % screen tested per group A

MILITARY FILM SMD RESISTORS

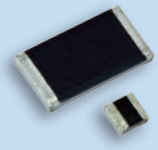
Military Specification	Model	Wattage Rating (W)	Charac-teristic	Resistance Range (Ω)	Tolerance	Part Number Definition
Established Reliability						
MIL-PRF-55342 [Thick Film] 	RM0502: /01 (RCWPM-0502)	0.05	M	1 to 9.1	± 2 to ± 10	**M55342 M 02 B 10E0 R** **1 2 3 4 5 6** **1: M55342** MIL. spec. no. indicating 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 to 22 M	± 1 to ± 10	
	RM0505: /02 (RCWPM-550)	0.125	M	1 to 9.1	± 2 to ± 10	
			K, M	10 to 22 M	± 1 to ± 10	
	RM1005: /03 (RCWPM-5100)	0.20	M	1 to 5.6	± 2 to ± 10	
			K, M	5.62 to 22 M	± 1 to ± 10	
	RM1505: /04 (RCWPM-5150)	0.15	M	1 to 5.6	± 2 to ± 10	
			K, M	5.62 to 22 M	± 1 to ± 10	
	RM2208: /05 (RCWPM-7225)	0.225	M	1 to 5.6	± 2 to ± 10	
			K, M	5.62 to 22 M	± 1 to ± 10	
	RM0705: /06 (RCWPM-575)	0.15	M	1 to 5.6	± 2 to ± 10	
			K, M	5.62 to 22 M	± 1 to ± 10	
	RM1206: /07 (RCWPM-1206)	0.25	M	1 to 5.6	± 2 to ± 10	
			K, M	5.62 to 22 M	± 1 to ± 10	
	RM2010: /08 (RCWPM-2010)	0.80	M	1 to 5.6	± 2 to ± 10	
			K, M	5.62 to 22 M	± 1 to ± 10	
	RM2512: /09 (RCWPM-2512)	1.0	M	1 to 5.6	± 2 to ± 5	
			K, M	5.62 to 22 M	± 1 to ± 5	
	RM1010: /10 (RCWPM-1100)	0.50	M	1 to 5.6	± 2 to ± 10	
			K, M	5.62 to 22 M	± 1 to ± 10	
	RM0402: /11 (RCWPM-0402)	0.05	M	1 to 9.1	± 2 to ± 10	
			K, M	10 to 22 M	± 1 to ± 10	
	RM0603: /12 (RCWPM-0603)	0.10	M	1 to 5.6	± 2 to ± 10	
			K, M	5.62 to 22 M	± 1 to ± 10	
	RM0302: /13 (RCWPM-0302)	0.04	M	1 to 9.1	± 2 to ± 10	
			K, M	10 to 22 M	± 1 to ± 10	

Military Specification	Model	Wattage Rating (W)	Charac-teristic	Resistance Range (Ω)	Tolerance	Part Number Definition
Established Reliability						
MIL-PRF-55342 [Thin Film] 	RM0502: /01 (M55342/01)	0.05	E	49.9 to 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 to 150 k	± 0.1 to ± 5	
	RM0505: /02 (M55342/02)	0.125	E	49.9 to 301 k	± 0.1 to ± 5	
			H, K, M	20 to 301 k	± 0.1 to ± 5	
	RM1005: /03 (M55342/03)	0.20	E	49.9 to 649 k	± 0.1 to ± 5	
			H, K, M	10 to 649 k	± 0.1 to ± 5	
	RM1505: /04 (M55342/04)	0.15	E	49.9 to 1.69 M	± 0.1 to ± 5	
			H, K, M	10 to 1.69 M	± 0.1 to ± 5	
	RM2208: /05 (M55342/05)	0.225	E	49.9 to 3.16 M	± 0.1 to ± 5	
			H, K, M	10 to 3.16M	± 0.1 to ± 5	
	RM0705: /06 (M55342/06)	0.15	E	49.9 to 475 k	± 0.1 to ± 5	
			H, K, M	10 to 475 k	± 0.1 to ± 5	
	RM1206: /07 (D55342/07)	0.25	E	49.9 to 1.5 M	± 0.1 to ± 5	
			H, K, M	10 to 1.5 M	± 0.1 to ± 5	
	RM2010: /08 (M55342/08)	0.80	E	49.9 to 4.02 M	± 0.1 to ± 5	
			H, K, M	10 to 4.02 M	± 0.1 to ± 5	
	RM2512: /09 (M55342/09)	1.0	E	49.9 to 6.19 M	± 0.1 to ± 5	
			H, K, M	10 to 6.19 M	± 0.1 to ± 5	
	RM1010: /10 (M55342/10)	0.50	E, H, K, M	49.9 to 1 M	± 0.1 to ± 5	
	RM0402: /11 (M55342/11)	0.05	E	49.9 to 100 k	± 0.1 to ± 5	
			H, K, M	20 to 100 k	± 0.1 to ± 5	
	RM0603: /12 (M55342/12)	0.10	E	49.9 to 258 k	± 0.1	
			E	49.9 to 261 k	± 1 to ± 5	
			H, K, M	10 to 258 k	± 0.1	
			H, K, M	10 to 261 k	± 1 to ± 5	

Resistance Tolerance and Multipliers						
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	1000	1 kΩ - 9xx kΩ
C	F	T	L	P	1 000 000	1 MΩ - 9xx MΩ

Examples		
54A2 = 54.2 Ω ± 0.1 %	2F21 = 2.21 MΩ ± 1 %	560K = 560 kΩ ± 5 %
20B0 = 20 kΩ ± 0.1 %	51G0 = 51 Ω ± 2 %	8L20 = 8.2 MΩ ± 5 %
965A = 965 Ω ± 0.1 %	10H0 = 10 kΩ ± 2 %	10M0 = 10 Ω ± 10 %
2C03 = 2.03 MΩ ± 0.1 %	33H0 = 33 kΩ ± 2 %	10N0 = 10 kΩ ± 10 %
11D3 = 11.3 Ω ± 1 %	2T20 = 2.2 MΩ ± 2 %	2P70 = 2.7 MΩ ± 10 %
10E0 = 10 kΩ ± 1 %	15J0 = 15 Ω ± 5 %	8P20 = 8.2 MΩ ± 10 %
332D = 332 Ω ± 1 %	10K0 = 10 kΩ ± 5 %	

Military Zero Ohm Jumper Drawings	Vishay Dale Model	Vishay Thin Film Model	Maximum Resistance (mΩ)	Part Number Definition
87011	RCWP-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	RCWP-0502-99		20	
90047	RCWP-7225-99	M-2208X	40	
90048	RCWP-575-99	M-0805X	20	
90049	RCWP-5100-99	M-1005X	30	
90092	RCWP-5150-99	M-1505X	40	
94011	RCWP-1206-99	M-1206X	20	
03002	RCWP-550-99	M-0505X	25	
03011	RCWP-0201-99		50	
03012	RCWP-0302-99		20	
03013	RCWP-0603-99	M-0603X	25	
03014	RCWP-0402-99	M-0402X	25	
03015	RCWP-2010-99	M-2010X	40	
03016	RCWP-2512-99	M-2512X	40	

Military Specification	Model	Wattage Rating (W)	Current Rating	Maximum Resistance (mΩ)	Part Number Definition
Established Reliability					
MIL-PRF-32159 	RCZ0502: /01 (RCWPM-0502-99)	0.05	1.3	30	**M32159 B 06 M** **1 2 3 4** **1: M32159** MIL. spec. no. indicating MIL-PRF-32159 **2: B** Termination material B = Pre-tinned nickel barrier, wraparound **3: 06** MIL. spec. sheet number **4: M** Failure rate level (reference current MIL-PRF-32159 QPL list)
	RCZ0505: /02 (RCWPM-550-99)	0.1	2.2	20	
	RCZ1005: /03 (RCWPM-5100-99)	0.2	2.8	25	
	RCZ1505: /04 (RCWPM-5150-99)	0.15	2.1	35	
	RCZ2208: /05 (RCWPM-7225-99)	0.225	2.5	35	
	RCZ0705: /06 (RCWPM-575-99)	0.15	2.7	20	
	RCZ1206: /07 (RCWPM-1206-99)	0.25	3.2	25	
	RCZ2010: /08 (RCWPM-2010-99)	0.8	5.7	25	
	RCZ2512: /09 (RCWPM-2512-99)	1	6.3	25	
	RCZ1010: /10 (RCWPM-1100-99)	0.5	5.0	20	
	RCZ0402: /11 (RCWPM-0402-99)	0.04	1.2	30	
	RCZ0603: /12 (RCWPM-0603-99)	0.07	1.5	30	
	RCZ0302: /13 (RCWPM-0302-99)	0.035	1.1	30	

Note: DSCC also offers a series of drawings for zero ohm chips. For additional information, see table below or consult appropriate DSCC drawing.

Notes

Notes

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