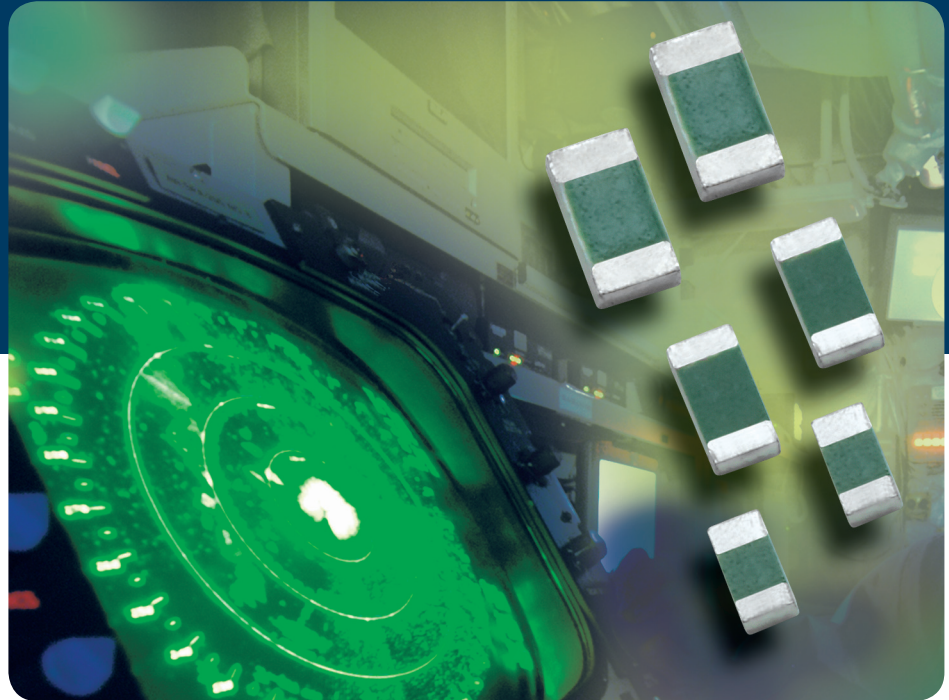




THIN FILM RESISTOR

E/H



QPL MIL-PRF-55342 Chip Resistor

Thin Film Resistor — QPL Established Reliability Military Chip Resistor

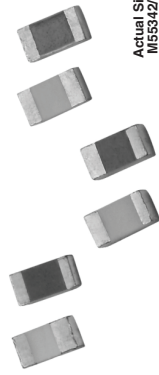
KEY BENEFITS

- Twelve qualified case sizes from 0402 to 2512
- Characteristics E, H, K, and M
- Precision tolerances to 0.1 %
- “R” failure rate level

APPLICATIONS

- Missile/air flight control
- Communication systems
- Ground support radar
- Guidance and navigation control

QPL MIL-PRF-55342 Qualified Thin Film Resistor Chips

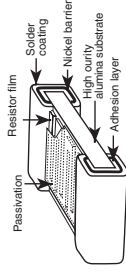


Actual Size
M55342/02

Thin Film Mill chip resistors feature all sputtered wraparound termination for excellent adhesion and dimensional uniformity. They are ideal in applications requiring stringent performance requirements. Established reliability is assured through 100% screening and extensive environmental lot testing. Water is sawed producing exact dimensions and clean, straight edges.

- Specification changed by DSCC from MIL-R-55342 to MIL-PRF-55342

CONSTRUCTION



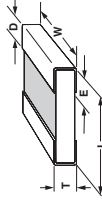
FEATURES

- Established reliability, "R" failure rate level (100 ppm), C = 2
- High purity alumina substrate 99.6% purity
- Wraparound termination featuring a tenacious adhesion layer covered with an electroplated nickel barrier layer for +150 °C operating conditions
- Very low noise and voltage coefficient (< -25 dB, 0.5 ppm/V)
- Non-inductive
- Laser-trimmed tolerances ± 0.1%
- Wraparound resistance less than 0.010 Ω typical
- In-lot tracking less than 5 ppm/°C
- Complete MIL-testing available in-house
- Antistatic waflie pack or tape and reel packaging available
- Military/aerospace/QPL

TYPICAL PERFORMANCE

TCR	ABS
TOL	25
	0.1

DIMENSIONS



CASE SIZE	TERM.	L	W	T	D	E
M55342/01	B	0.065 ± 0.006	0.025 ± 0.005	0.010 to 0.030	0.010 ± 0.005	0.015 ± 0.005
M55342/02	B	0.065 ± 0.006	0.050 ± 0.005	0.012 to 0.033	0.010 ± 0.005	0.015 ± 0.005
M55342/03	B	0.105 ± 0.007	0.050 ± 0.005	0.015 to 0.033	0.015 ± 0.005	0.015 ± 0.005
M55342/04	B	0.155 ± 0.007	0.050 ± 0.005	0.015 to 0.033	0.015 ± 0.005	0.015 ± 0.005
M55342/05	B	0.230 ± 0.007	0.075 ± 0.005	0.015 to 0.033	0.020 ± 0.005	0.020 ± 0.005
M55342/06	B	0.080 ± 0.006	0.050 ± 0.005	0.015 to 0.033	0.016 ± 0.008	0.015 ± 0.005
D55342/07	B	0.126 ± 0.008	0.063 ± 0.005	0.015 to 0.033	0.020 ± 0.005	0.020 ± 0.005
M55342/08	B	0.209 ± 0.009/-0.018	0.098 ± 0.005	0.015 to 0.033	0.020 ± 0.005	0.020 ± 0.005
M55342/09	B	0.259 ± 0.009/-0.015	0.124 ± 0.005	0.015 to 0.033	0.020 ± 0.005	0.020 ± 0.005
M55342/10	B	0.105 ± 0.007	0.100 ± 0.005	0.015 to 0.033	0.015 ± 0.005	0.015 ± 0.005
M55342/11	B	0.040 ± 0.005	0.025 ± 0.005	0.010 to 0.030	0.010 ± 0.005	0.015 ± 0.005
M55342/12	B	0.064 ± 0.006	0.032 ± 0.005	0.010 to 0.033	0.012 ± 0.005	0.015 ± 0.005

RESISTANCE RANGE (%) BY CHARACTERISTICS TOLERANCE

CASE SIZE	MAX. WORKING VOLTAGE	POWER RATING (mW)	RESISTANCE RANGE (%) BY CHARACTERISTICS TOLERANCE		
			E (1%, 2%, 5%)	H, K, M (0.1%)	H, K, M (1%, 2%, 5%)
M55342/01	40	50	49.9 to 150K	20 to 150K	20 to 150K
M55342/02	40	125	49.9 to 301K	20 to 301K	20 to 301K
M55342/03	75	200	49.9 to 649K	10 to 649K	10 to 649K
M55342/04	125	150	49.9 to 1.69M	10 to 1.69M	10 to 1.69M
M55342/05	175	225	49.9 to 3.16M	10 to 3.16M	10 to 3.16M
M55342/06	50	150	49.9 to 475K	10 to 475K	10 to 475K
D55342/07	100	250	49.9 to 1.5M	10 to 1.5M	10 to 1.5M
M55342/08	150	800	49.9 to 4.02M	10 to 4.02M	10 to 4.02M
M55342/09	200	1000	49.9 to 6.19M	10 to 6.19M	10 to 6.19M
M55342/10	75	500	49.9 to 1M	49.9 to 1M	49.9 to 1M
M55342/11	30	50	49.9 to 100K	20 to 100K	20 to 100K
M55342/12	50	100	49.9 to 258K	10 to 258K	10 to 258K

Note

- Values listed are a guide, refer to mil spec for value/tolerance allowance

Revision 16-Sep-09

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