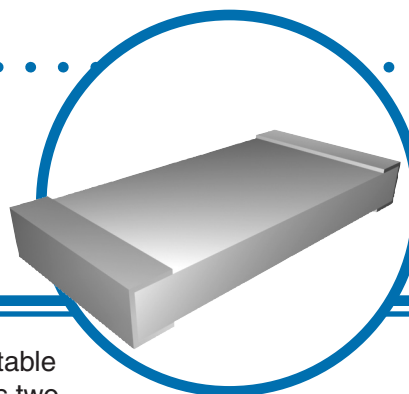


Precision Military Qualified Chip Resistors

MIL-CHIP Series

- 6 industry chip sizes available
- Thin and thick film technologies
- MIL-PRF-55342 Characteristics E, H, K, and M
- MIL-PRF-55342 extended reliability levels C, M, P, R, and S



The IRC military chip resistor series provides precision and stable performance in six industry standard chip sizes. IRC now utilizes two film technologies to expand our options in size, resistance range and tolerance. IRC's proprietary thick film technology provides extended range and lower cost while our exclusive thin film (TaNFilm® tantalum nitride) technology provides precision and superior performance in the harshest moisture environment.

Electrical Data

Style Size	Technology	MIL-PRF-55342 Characteristic	Tolerance	Resistance Range (Ω)	Power Rating (mW)	Voltage Rating* (V)	Reliability Level	Termination Type
Style 12 RM0603	Thin Film (TaNFilm®)	E, H, K, M	±0.1%	100R - 59K	100	50	C, M, P, R, S	Type `B` Sn/Pb solder over nickel barrier
			±1%, ±2%, ±5%, ±10%	10R0- 59K				
Style 06 RM0705	Thin Film (TaNFilm®)	E, H, K, M	±0.1%	100R - 125K	150	50	C, M, P, R, S	
			±1%, ±2%, ±5%, ±10%	10R0- 125K				
Style 04 RM1505	Thin Film (TaNFilm®)	E, H, K, M	±0.1%	100R - 125K	150	125	C, M, P, R, S	
			±1%, ±2%, ±5%, ±10%	10R0- 125K				
Style 07 RM1206	Thin Film (TaNFilm®)	E, H, K, M	±0.1%	100R - 125K	250	100	C, M, P, R, S	
			±1%, ±2%, ±5%, ±10%	10R0- 125K				
Style 07 RM1206	Thick Film	K, M	±1%, ±2%, ±5%, ±10%	5R62 - 10M	250	100	C, M, P, R	
Style 08 RM2010	Thick Film	K, M	±1%, ±2%, ±5%, ±10%	5R62 - 15M	800	150		
Style 09 RM2512	Thick Film	K, M	±1%, ±2%, ±5%, ±10%	5R62 - 15M	1000	200		

General Note

IRC reserves the right to make changes in product specification without notice or liability. All information is subject to IRC's own data and is considered accurate at time of going to print.

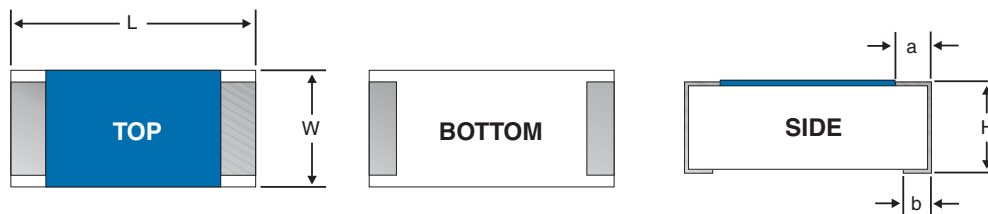
Precision Military Qualified Chip Resistors



Environmental Data

Environmental Test MIL-PRF-55342	Thick Film Performance		Thin Film Performance	
	MIL-PRF-55342 Characteristic K	Typical IRC ΔR	MIL-PRF-55342 Characteristic H	Typical IRC ΔR
Thermal Shock	$\pm 0.5\%$	$\pm 0.04\%$	$\pm 0.25\%$	$\pm 0.02\%$
Low Temperature Operation	$\pm 0.25\%$	$\pm 0.01\%$	$\pm 0.25\%$	$\pm 0.01\%$
Short-time Overload	$\pm 0.25\%$	$\pm 0.03\%$	$\pm 0.10\%$	$\pm 0.01\%$
High Temperature Exposure	$\pm 0.5\%$	$\pm 0.05\%$	$\pm 0.50\%$	$\pm 0.03\%$
Resistance to Solder	$\pm 0.25\%$	$\pm 0.09\%$	$\pm 0.25\%$	$\pm 0.01\%$
Moisture Resistance	$\pm 0.5\%$	$\pm 0.06\%$	$\pm 0.40\%$	$\pm 0.03\%$
Life	$\pm 2.0\%$	$\pm 0.10\%$	$\pm 2.0\%$	$\pm 0.03\%$

Physical Data

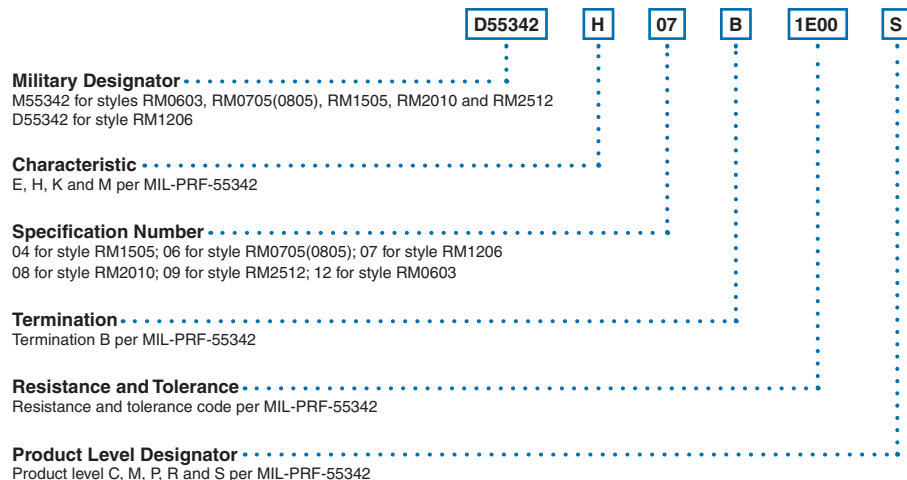


	L	W	H	a	b
0603	0.063" ± 0.004	0.031" ± 0.004	0.020" ± 0.004	0.008" ± 0.004	0.008" ± 0.004
0805	0.081" ± 0.005	0.050" ± 0.005	0.020" ± 0.006	0.016" ± 0.008	0.016" ± 0.008
1505	0.155" ± 0.007	0.050" ± 0.005	0.025" ± 0.003	0.015" ± 0.008	0.015" ± 0.008
1206 (Thin Film)	0.126" ± 0.006	0.063" ± 0.005	0.024" ± 0.004	0.016" ± 0.008	0.016" ± 0.008
1206 (Thick Film)	0.126" ± 0.008	0.063" ± 0.005	0.024" ± 0.004	0.020" ± 0.005 / -0.010	0.020" ± 0.005 / -0.010
2010	0.209" ± 0.009	0.098" ± 0.005	0.028" ± 0.005	0.020" ± 0.005	0.020" ± 0.005
2512	0.259" ± 0.009	0.124" ± 0.005	0.028" ± 0.005	0.020" ± 0.005	0.020" ± 0.005

Precision Military Qualified Chip Resistors



Ordering Data For Performance Specification MIL-PRF-55342



Packaging
Standard order packaging is 8mm or 12mm tape per EIA 481. Conductive waffle pack packaging is also available.

For additional information or to discuss your specific requirements,
please contact our Applications team using the contact details below.