

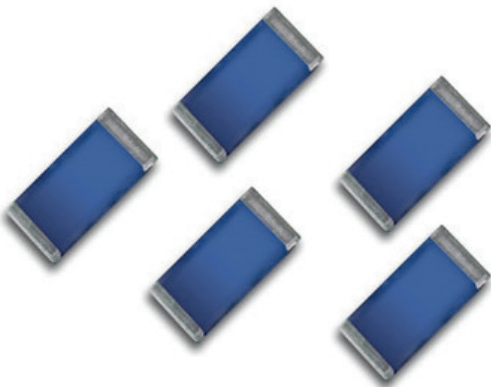
Precision Military and Space Qualified Chip Resistors



MIL-CHIP Series

Features

- Now qualified to MIL-PRF-55342 Space Level T
- Four industry standard sizes available
- MIL-PRF-55342 Characteristics E, H, K, and M
- MIL-PRF-55342 extended reliability levels C, M, P, R, S and T



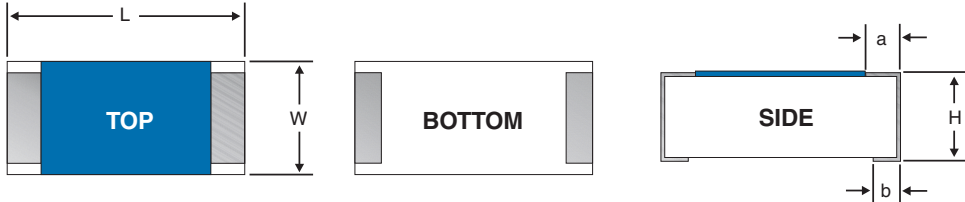
MIL-PRF-55342 Qualified Product Listing (QPL)

Style Size	Technology	MIL-PRF-55342 Characteristic	Tolerance	Resistance Range (Ω)	Rated Voltage* (V)	Rated Power (mW)	Reliability Level	Termination Type
Style 11 RM0402	Thin Film PFC Series (TaNFilm®)	E, H, K, M	±0.1%	100R - 30K	30	50	C, M, P, R, S	Type `B` Sn/Pb solder over nickel barrier
			±1%	49R9 - 29K				
			±2%, ±5%	51R0 - 30K				
			±10%	51R0 - 27K				
Style 12 RM0603	Thin Film PFC Series (TaNFilm®)	E, H, K, M	±0.1%, ±1%	10R0 - 59K	50	100	C, M, P, R, S, T	
			±2%, ±5%, ±10%	10R0- 56K				
Style 06 RM0705	Thin Film PFC Series (TaNFilm®)	E, H, K, M	±0.1%	10R0 - 125K	50	150	C, M, P, R, S, T	
			±1%	10R0- 124K				
			±2%, ±5%, ±10%	10R0- 120K				
Style 07 RM1206	Thin Film PFC Series (TaNFilm®)	E, H, K, M	±0.1%	100R - 500K	100	250	C, M, P, R, S, T	
			±1%	10R0- 499K				
			±2%, ±5%, ±10%	10R0- 470K				

*Note: Voltage shall not exceed $\sqrt{P \times R}$.

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

Physical Data

					
	L	W	H	a	b
0402	0.040" ±0.002	0.021" ±0.002	0.012" ±0.003	0.008" ±0.002	0.010" ±0.002
0603	0.063" ±0.004	0.031" ±0.004	0.020" ±0.004	0.012" ±0.005	0.015" ±0.005
0805	0.081" ±0.005	0.050" ±0.005	0.020" ±0.006	0.016" ±0.008	0.016" ±0.008
1206	0.126" ±0.006	0.063" ±0.005	0.024" ±0.004	0.016" ±0.008	0.016" ±0.008

Environmental Data

Environmental Test MIL-PRF-55342	Thin Film Performance	
	MIL-PRF-55342 Characteristic H	Typical IRC ΔR
Thermal Shock	±0.25%	±0.02%
Low Temperature Operation	±0.25%	±0.01%
Short-time Overload	±0.10%	±0.01%
High Temperature Exposure	±0.50%	±0.03%
Resistance to Solder	±0.25%	±0.01%
Moisture Resistance	±0.40%	±0.03%
Life	±2.0%	±0.03%

Packaging

Standard packing for all styles is tape and reel in a quantity of 500 pieces.
Optionally the reel quantity may be 1000 pieces, and product level T (space) has an additional option of 300 pieces per reel.
A service of packing to waffle trays of 100 pieces is available for styles 12, 06 and 07.

Ordering Procedure

Example: D55342H07B1E00S (Style RM1206, $\pm 50\text{ppm}/^{\circ}\text{C}$, specification number 07, SnPb termination, $1\text{k}\Omega$, $\pm 1\%$, failure rate 0.001%/1000 hours)

D	5	5	3	4	2	H	0	7	B	1	E	0	0	S
1						2	3	4	5					6

1 Military Designator		2 Characteristic		3 Specification		4 Termination		5 Value & Tolerance	6 Product Level	
M55342	0402,	E	25ppm/°C	11	0402	B	SnPb	4 character code. Letter code marks decimal position and indicates multiplier and tolerance - see table below.	C	Non-ER
	0603,	H	50 ppm/°C	12	0603				M	1%/1000hrs
	0805	K	100 ppm/°C	06	0805				P	0.1%/1000hrs
D55342	1206	M	300 ppm/°C	07	1206				R	0.01%/1000hrs
									S	0.001%/1000hrs
									T	Space level

Value & Tolerance Code		Multiplier		
		x1	x 1000	x1000,000
Tolerance	0.1%	A	B	C
	1%	D	E	F
	2%	G	H	T
	5%	J	K	L
	10%	M	N	P