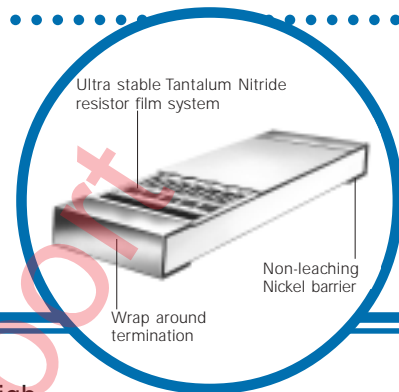


# Precision Thin Film Military Chip Resistors

## PFC Series

- Qualified to MIL-PRF-55342 characteristics E, H, K, and M
- MIL-PRF-55342 tested failure rates M, P, R, and S
- Qualified to DSCC specifications 94015 and 94016
- 4 industry standard chip sizes available



The IRC TaNFilm® PFC military chip resistor series provides the high precision and ultra stable performance in four standard chip sizes.

The unique characteristics of the self passivated Tantalum Nitride film insure long term life stability and moisture resistance stability in the harshest environments, easily surpassing MIL-PRF-55342 requirements in addition to the demanding moisture resistance tests required by 94015 and 94016.

Standard packaging is 8mm tape per EIA 481. Conductive waffle pack packaging is also available.

## Electrical Data

Characteristic	Conditions	RM0603	RM0705	RM1505	RM1206
Resistance Range (Ω) MIL-PRF-55342	±1%,±2%,±5%,±10%	10R - 59K	10R - 125K	10R - 125K	10R - 125K
	±0.1%	100R - 59K	100R - 125K	100R - 125K	100R - 125K
Resistance Range (Ω) 94015 (RM0705) 94016 (RM1206)	±1%,±2%,±5%,±10%	N/A	10R - 249K	N/A	10R - 500K
	±0.1%		100R - 249K		100R - 500K
Maximum Voltage Rating	Char. M, K, H, E	50 Volts	50 Volts	40 Volts	100 Volts
Power Rating	Char. H and E	70 mW	50 mW	100 mW	125 mW
	Char. M and K	70 mW	100 mW	125 mW	250 mW
Power Derating	-65°C to +150°C	100% power from -65°C to 70°C derated linearly to 0% from 70°C to 150°C			
Operating Temperature Range	-65°C to +150°C				
Noise	Less than -25 db				
Termination	Solder over nickel (Type B per MIL-PRF-55342)				

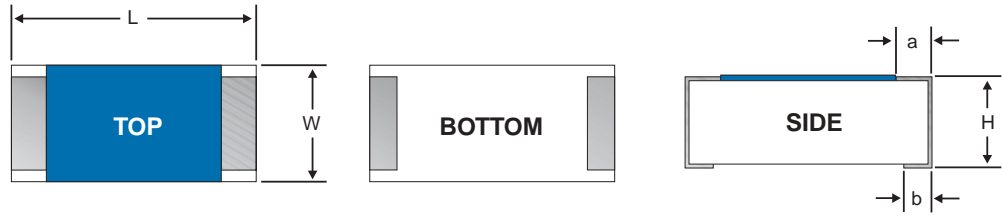
### General Note

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.

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# Precision Thin Film Military Chip Resistors

## Physical Data



	L	W	H	a	b
<b>W0603</b>	0.063"±.004"	0.031"±.004"	0.020"±.004"	0.008"±.004"	0.008"±.004"
<b>W0805</b>	0.081"±.005"	0.050"±.005"	0.020"±.006"	0.016"±.008"	0.016"±.008"
<b>W1206</b>	0.126"±.006"	0.063"±.005"	0.024"±.004"	0.016"±.008"	0.016"±.008"
<b>W1505</b>	0.155"±.007"	0.050"±.005"	0.025"±.003"	0.015"±.008"	0.015"±.008"

## Environmental Data

Environmental Test MIL-PRF-55342	Maximum $\Delta R$ per Characteristic E	Performance	
		Typical	Maximum
Thermal Shock	±0.10%	±0.02%	±0.05%
Low Temperature Operation	±0.10%	±0.01%	±0.05%
Short Time Overload	±0.10%	±0.01%	±0.05%
High Temperature Exposure	±0.10%	±0.03%	±0.05%
Effects of Solder	±0.20%	±0.01%	±0.05%
Moisture Resistance	±0.20%	±0.03%	±0.05%
Life	±0.50%	±0.03%	±0.10%

# Precision Thin Film Military Chip Resistors



## Ordering Data for Performance Specification MIL-PRF-55342

D55342

H

07

B

1E00

S

### Military Designator

M55342 for Styles RM0603, RM0705(0805), and RM1505  
D55342 for Style RM1206

### Characteristic

E, H, K, and M per MIL-PRF-55342

### Specification Number

04 for Style RM1505; 06 for Style RM0705(0805)  
07 for Style RM1206; 12 for Style RM0603

### Termination

Termination B per MIL-PRF-55342

### Resistance and Tolerance

Resistance and tolerance code per MIL-PRF-55342

### Product Level Designator

Product level M, P, R, and S per MIL-PRF-55342

## Ordering Data for DSCC Specifications 94015 and 94016

94016

H

1002

F

B

### DSCC Designator

94015 for Style RM0705(0805); 94016 for style RM1206

### Characteristic

E, H, K, and M per MIL-PRF-55342

### Resistance Code

Standard 4-digit resistance code  
Ex: 1002 - 10K $\Omega$ ; 50R1 = 50.1 $\Omega$

### Tolerance Code

K =  $\pm 10\%$ ; J =  $\pm 5\%$ ; G =  $\pm 2\%$ ; F =  $\pm 1\%$ ; B =  $\pm 0.1\%$

### Termination Material

Termination B per MIL-PRF-55342