

INCH-POUND
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MIL-PRF-55182H  
SUPPLEMENT 1  
26 September 2002

## PERFORMANCE SPECIFICATION

### RESISTORS, FIXED, FILM, NONESTABLISHED RELIABILITY, ESTABLISHED RELIABILITY, AND SPACE LEVEL, GENERAL SPECIFICATION FOR

This supplement forms a part of MIL-PRF-55182H, dated 26 September 2002

#### PERFORMANCE SPECIFICATIONS

MIL-PRF-55182/1	- Resistors, Fixed, Film, Non-Established Reliability, Established Reliability, and Space Level, Style RN*55. <u>1/</u>
MIL-PRF-55182/2 <u>2/</u>	- Resistors, Fixed, Film, Non-Established Reliability, Established Reliability, and Space Level, Style RN*57. <u>1/</u>
MIL-PRF-55182/3	- Resistors, Fixed, Film, Non-Established Reliability, Established Reliability, and Space Level, Style RN*60. <u>1/</u>
MIL-PRF-55182/5	- Resistors, Fixed, Film, Non-Established Reliability, Established Reliability, and Space Level, Style RN*65. <u>1/</u>
MIL-PRF-55182/6	- Resistors, Fixed, Film, Non-Established Reliability, Established Reliability, and Space Level, Style RN*70. <u>1/</u>
MIL-PRF-55182/7	- Resistors, Fixed, Film, Non-Established Reliability, Established Reliability, and Space Level, Style RN*50. <u>1/</u>
MIL-PRF-55182/9	- Resistors, Fixed, Film, Non-Established Reliability, Established Reliability, and Space Level, Style RN*90. <u>1/</u>
MIL-PRF-55182/10	- Resistors, Fixed, Film, Non-Established Reliability, Established Reliability, and Space Level, Style RN*75. <u>1/</u>
MIL-R-55182/11 <u>3/</u>	- Resistors, Fixed, Film, Established Reliability, Style RN*51. <u>1/</u>
MIL-R-55182/12 <u>3/</u>	- Resistors, Fixed, Film, Established Reliability, Style RN*56. <u>1/</u>
MIL-PRF-55182/13	- Resistors, Fixed, Film, Non-Established Reliability, Established Reliability, and Space Level, Style RN*77. <u>1/</u>

1/ Third letter is variable, dependent upon lead material or capability.

2/ Inactive for new design after 8 July 1970.

3/ Inactive for new design after 19 November 1985.

TABLE I. Performance characteristics.

Maximum resistance temperature characteristic (see 3.15): Percent per/°C Part/million/°C	C Hermetically sealed (see 3.12)	H Nonhermetically sealed (see 3.12.1 and 6.4)	E Hermetically sealed (see 3.12)	J Nonhermetically sealed (see 3.12.1 and 6.4)	K Nonhermetically sealed (see 3.12.1 and 6.4)	T & Y Nonhermetically sealed (see 3.12.1 and 6.4) (RN*90)	S & Z Nonhermetically sealed (see 3.12.1 and 6.4) (RN*90)
	±0.005 ±50	±0.005 ±50	±0.0025 ±25	±0.0025 ±25	±0.010 ±100	±0.0005 ±5 <u>5</u> /	±0.0002 ±2 <u>9</u> /
Maximum ambient temperature at rated wattage (see figure 2)	+125°C	+125°C	+125°C	+125°C	+125°C	+125°C	+125°C
Maximum ambient temperature at zero derating (see figure 2)	+175°C	+175°C	+175°C	+175°C	+175°C	+175°C	+175°C
Power rating in watts and maximum dc or rms voltage: <u>1</u> / <u>6</u> / Style RN*50 Style RN*55 Style RN*57 <u>8</u> / Style RN*60 Style RN*65 Style RN*70 Style RN*75 Style RN*77 Style RN*90	NA <u>2</u> / 1/10 W, 200 V 1/8 W, 250 V 1/8 W, 250 V 1/4 W, 300 V 1/2 W, 350 V 1.0 W, 750 V 1.0 W, 750 V --- ---	1/20 W, 200 V 1/10 W, 200 V NA <u>2</u> / 1/8 W, 250 V 1/8 W, 250 V 1/4 W, 300 V 1/2 W, 350 V 1.0 W, 750 V 1.0 W, 750 V --- ---	NA <u>2</u> / 1/10 W, 200 V 1/8 W, 250 V 1/8 W, 250 V 1/4 W, 300 V 1/2 W, 350 V 1.0 W, 750 V 1.0 W, 750 V --- ---	1/20 W, 200 V 1/10 W, 200 V NA <u>2</u> / 1/8 W, 250 V 1/8 W, 250 V 1/4 W, 300 V 1/2 W, 350 V 1.0 W, 750 V 1.0 W, 750 V --- ---	1/20 W, 200 V 1/10 W, 200 V NA <u>2</u> / 1/8 W, 250 V 1/8 W, 250 V 1/4 W, 300 V 1/2 W, 350 V 1.0 W, 750 V 1.0 W, 750 V --- ---	3/10 W, 300 V	3/10 W, 300 V
Maximum percent change in resistance ±: <u>3</u> / Thermal shock (see 3.8) <u>4</u> / <u>7</u> / Overload (see 3.9) <u>4</u> / Low temperature operation (see 3.16) Low temperature storage (see 3.29) Terminal strength (see 3.17) Dielectric withstanding voltage (see 3.18) Resistance to soldering heat (see 3.20) Moisture resistance (see 3.21) Shock, specified pulse (see 3.22) Vibration, high frequency (see 3.23) Life (see 3.24) High temperature exposure (see 3.25) Insulation resistance (see 3.19) Insulation resistance wet (see 3.19)	0.2 0.15 0.15 0.2 0.15 0.1 0.2 0.2 0.2 (see 3.24) 2.0 10,000 megohms minimum 100 megohms minimum	0.2 0.15 0.15 0.2 0.15 0.1 0.4 0.2 0.2 (see 3.24) 2.0 10,000 megohms minimum 100 megohms minimum	0.2 0.15 0.15 0.2 0.15 0.1 0.2 0.2 0.2 (see 3.24) 2.0 10,000 megohms minimum 100 megohms minimum	0.2 0.15 0.15 0.2 0.15 0.1 0.4 0.2 0.2 (see 3.24) 2.0 10,000 megohms minimum 100 megohms minimum	0.2 0.15 0.15 0.2 0.15 0.1 0.4 0.2 0.2 (see 3.24) 2.0 10,000 megohms minimum 100 megohms minimum	0.05 0.05 0.05 0.02 0.02 0.02 0.05 0.01 0.02 (see 3.24) 0.5 10,000 megohms minimum 100 megohms minimum	0.05 0.05 0.05 0.02 0.02 0.02 0.05 0.01 0.02 (see 3.24) 0.5 10,000 megohms minimum 100 megohms minimum
Resistance tolerance ± percent (see table V)	1.0, 0.5, 0.1 as applicable (see 3.1)	1.0, 0.5, 0.1 as applicable (see 3.1)	1.0, 0.5, 0.1 as applicable (see 3.1)	1.0, 0.5, 0.1 as applicable (see 3.1)	1.0, 0.5	0.005, 0.01, 0.05, 0.1, 1.0, 0.5	0.005, 0.01, 0.05, 0.1, 1.0, 0.5

1/ Third letter is dependent upon lead material or capability.

2/ NA: Not applicable.

3/ Where total resistance change is 1 percent or less, it shall be considered as +(   percent +0.01 ohm).

4/ Shall not exceed 0.2 percent for these two tests combined.

5/ Maximum resistance-temperature characteristic = ±5 ppm/°C (±0.0005 percent per degree C) up to and including +125°C and +10 ppm/°C (+0.001 percent per degree C) from 125°C to 175°C.

6/ For +70°C power rating, see 3.1.

7/ Requirement paragraph numbers noted in parenthesis are not applicable to characteristics T, Y, S, &amp; Z. For applicable requirement paragraph numbers, see MIL-PRF-55182/9.

8/ Inactive for new design.

9/ Maximum resistance-temperature characteristic = ±2 ppm/°C (±0.0002 percent per degree C) up to and including +175°C.

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SUPPLEMENT 1

Preparing activity:  
Army - CR

Agent:  
DLA - CC

(Project 5905-1677-99)