

PERFORMANCE SPECIFICATION

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

This supplement forms a part of [MIL-PRF-55182K w/Amendment 1](#), dated 15 August 2024.

PERFORMANCE SPECIFICATIONS

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

[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.

Comments, suggestions, or questions on this document should be addressed to: DLA Land and Maritime, ATTN: VAT, Post Office Box 3990, Columbus Ohio 43218-3990, or emailed to resistor@dla.mil. Since contact information can change, you may want to verify the currency of this address information using the ASSIST Online database at <https://assist.dla.mil>.

AMSC N/A

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FSC 5905



MIL-PRF-55182K
SUPPLEMENT 1A

TABLE I. Performance characteristics.

Characteristic	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)
Maximum resistance temperature characteristic (see 3.15)	±50 ppm/°C		±25 ppm/°C		±100 ppm/°C
Maximum ambient temperature at rated wattage (see figure 2)	+125°C				
Maximum ambient temperature at zero derating (see figure 2)	+175°C				
Power rating in watts and maximum DC or RMS voltage: <u>1/</u> <u>2/</u> Style RN*50 MIL-PRF-55182/7 Style RN*55 MIL-PRF-55182/1 Style RN*57 MIL-PRF-55182/2 <u>4/</u> Style RN*60 MIL-PRF-55182/3 Style RN*65 MIL-PRF-55182/5 Style RN*70 MIL-PRF-55182/6 Style RN*75 MIL-PRF-55182/10 Maximum percent change in resistance ±: <u>5/</u> Thermal shock (see 3.8) <u>6/</u> Overload (see 3.9) <u>6/</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)	NA <u>3/</u> 1/8 W, 250V	1/20 W, 200 V NA <u>3/</u>	NA <u>3/</u> 1/10W, 200 V 1/8 W, 250 V 1/8 W, 250 V 1/4 W, 300 V 1/2 W, 350 V 1/2 W, 350 V	1/20 W, 200 V NA <u>3/</u>	1/20 W, 200 V NA <u>3/</u>
			0.2		
			0.15		
			0.15		
			0.2		
			0.15		
			0.1		
	0.2	0.4	0.2	0.4	0.4
			0.2		
			0.2		
			2.0		
			10,000 megohms minimum 100 megohms minimum		
Resistance tolerance ± percent (see table V of MIL-PRF-55182) See footnotes at end of table.	1.0, 0.5, 0.1 as applicable (see 3.1)				1.0, 0.5

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SUPPLEMENT 1A

TABLE I. Performance characteristics - Continued.

(RN*90) MIL-PRF-55182/9 9/		
Characteristic	T & Y Nonhermetically sealed	S & Z Nonhermetically sealed
	(see 3.12.1 and 6.4)	
Maximum resistance temperature characteristic (see 3.15 of MIL-PRF-55182)	7/	8/
Maximum ambient temperature at rated wattage (see figure 2)	+125°C	
Maximum ambient temperature at zero derating (see figure 2)	+175°C	
Power rating in watts and maximum DC or RMS voltage: 1/ 2/	3/10 W, 300V	
Maximum percent change in resistance ±: 5/		
Thermal shock (see 3.6) 6/	0.05	
Overload (see 3.7) 6/		
Low temperature operation (see 3.8)	0.05	
Low temperature storage (see 3.17)	0.05	
Terminal strength (see 3.9)	0.02	
Dielectric withstanding voltage (see 3.10)	0.02	
Resistance to soldering heat (see 3.11)	0.02	
Moisture resistance (see 3.12)	0.05	
Shock, specified pulse (see 3.13)	0.01	
Vibration, high frequency (see 3.14)	0.02	
Life (see 3.15)		
High temperature exposure (see 3.16)	0.5	
Insulation resistance (see 3.19)	10,000 megohms minimum	
Insulation resistance wet (see 3.19)	100 megohms minimum	
Resistance tolerance ± percent (see table IV)	0.005, 0.01, 0.05, 0.1, 1.0, 0.5	

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

2/ For +70°C power rating, see 3.1.

3/ NA: Not applicable.

4/ Inactive for new design.

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

6/ Shall not exceed 0.2 percent (0.05 percent for RN*90) for these two tests combined.

7/ Maximum resistance-temperature characteristic = ±5 ppm/°C up to and including +125°C
and +10 ppm/°C from 125°C to 175°C.

8/ Maximum resistance-temperature characteristic = Resistance temperature characteristic
(referenced to +25°C) = ±2.0 ppm/°C for values of 30.1 ohms and higher; ±3.0 ppm/°C
for values of 4.99 to 30.00 ohms, up to and including +175°C. 300 volts maximum
working voltage.

9/ Requirement paragraph numbers noted in parenthesis are reference to MIL-PRF-55182/9,
unless otherwise specified.

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SUPPLEMENT 1A

Custodians:

Army - CR
Navy - EC
Air Force - 85
DLA - CC
NASA - NA

Preparing activity:

DLA - CC

Review activities:

Army - AR, EA
Navy - AS, CG, MC, OS
Air Force - 19

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