INCH-POUND
MIL-PRF-55182H
SUPPLEMENT 1A
22 March 2007
SUPERSEDING
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. 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-R-55182/11 3/	-	Resistors, Fixed, Film, Established Reliability, Style RN*51. 1/
MIL-R-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.

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TABLE I. Performance characteristics.

	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):					
Percent/ºC	±0.005	±0.005	±0.0025	±0.0025	±0.010
Part/million/ºC	±50	±50	±25	±25	±100
Maximum ambient temperature at rated wattage (see figure 2)	+125ºC	+125ºC	+125ºC	+125ºC	+125ºC
Maximum ambient temperature at zero derating (see figure 2)	+175ºC	+175ºC	+175ºC	+175ºC	+175ºC
Power rating in watts and maximum dc or rms voltage: 1/ 2/					
Style RN*50	NA 3/	1/20 W, 200 V	NA 3/	1/20 W, 200 V	1/20 W, 200 V
Style RN*55	1/10W, 200 V	1/10W, 200 V	1/10W, 200 V	1/10W, 200 V	1/10W, 200 V
Style RN*57 4/	1/8 W, 250V	NA 3/	1/8 W, 250V	NA 3/	NA 3/
Style RN*60	1/8 W, 250 V	1/8 W, 250 V	1/8 W, 250 V	1/8 W, 250 V	1/8 W, 250 V
Style RN*65	1/4 W, 300 V	1/4 W, 300 V	1/4 W, 300 V	1/4 W, 300 V	1/4 W, 300 V
Style RN*70	1/2 W, 350 V	1/2 W, 350 V	1/2 W, 350 V	1/2 W, 350 V	1/2 W, 350 V
Style RN*75	1.0 W, 750 V	1.0 W, 750 V	1.0 W, 750 V	1.0 W, 750 V	1.0 W, 750 V
Maximum percent change in resistance ±: 5/					
Thermal shock (see 3.8) 6/	0.2	0.2	0.2	0.2	0.2
Overload (see 3.9) 6/					
Low temperature operation (see 3.16)	0.15	0.15	0.15	0.15	0.15
Low temperature storage (see 3.16)	0.15	0.15	0.15	0.15	0.15
Terminal strength (see3.17)	0.2	0.2	0.2	0.2	0.2
Dielectric withstanding voltage (see 3.18)	0.15	0.15	0.15	0.15	0.15
Resistance to soldering heat (see 3.20)	0.1	0.1	0.1	0.1	0.1
Moisture resistance (see 3.21)	0.2	0.4	0.2	0.4	0.4
Shock, specified pulse (see 3.22)	0.2	0.2	0.2	0.2	0.2
Vibration, high frequency (see 3.23)	0.2	0.2	0.2	0.2	0.2
Life (see 3.24)	(see 3.24)	(see 3.24)	(see 3.24)	(see 3.24)	(see 3.24)
High temperature exposure (see 3.25)	2.0	2.0	2.0	2.0	2.0
Insulation resistance (see 3.19)	10,000 megohms minimum	10,000 megohms minimum	10,000 megohms minimum	10,000 megohms minimum	10,000 megohms minimum
Insulation resistance wet (see 3.19)	100 megohms minimum	100 megohms minimum	100 megohms minimum	100 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

See footnotes at end of table.

TABLE I. Performance characteristics - Continued.

	T & Y Nonhermetically sealed (see 3.12.1 and 6.4)	S & Z Nonhermetically sealed (see 3.12.1 and 6.4)
Maximum resistance temperature characteristic (see 3.15):		
Percent/ºC	±0.0005	±0.0002
Part/million/ºC	±5 7/	±2 8/
Maximum ambient temperature at rated wattage (see figure 2)	+125ºC	+125ºC
Maximum ambient temperature at zero derating (see figure 2)	+175ºC	+175ºC
Power rating in watts and maximum dc or rms voltage: 1/ 2/ Style RN*90	3/10 W, 300V	3/10 W, 300 V
Maximum percent change in resistance ±: 5/ 9/		
Thermal shock (see 3.6) 6/	0.05	0.05
Overload (see 3.7) 6/		
Low temperature operation (see 3.8)	0.05	0.05
Low temperature storage (see 3.17)	0.05	0.05
Terminal strength (see 3.9)	0.02	0.02
Dielectric withstanding voltage (see 3.10)	0.02	0.02
Resistance to soldering heat (see 3.11)	0.02	0.02
Moisture resistance (see 3.12)	0.05	0.05
Shock, specified pulse (see 3.13)	0.01	0.01
Vibration, high frequency (see 3.14)	0.02	0.02
Life (see 3.15)	(see 3.15) 9/	(see 3.15) 9/
High temperature exposure (see 3.16)	0.5	0.5
Insulation resistance	10,000 megohms minimum	10,000 megohms minimum
Insulation resistance wet	100 megohms minimum	100 megohms minimum
Resistance tolerance ± percent (see table IV) 9/	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/ 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 (±.0005 percent per degree C) up to and including +125°C and +10 ppm/°C (+.001 percent per degree C) form 125°C to 175°C.
8/ Maximum resistance-temperature characteristic = ±2 ppm/°C (±.0002 percent per degree C) up to and including +175°C.
9/ Requirement paragraph numbers noted in parenthesis are reference to MIL-PRF-55182/9.

Custodians:
Army – CR
Navy – EC
Air Force – 11
DLA - CC

Review activities:
Army – AR, EA
Navy – AS, CG, MC, OS
Air Force – 19, 99

Civil agencies:
NASA – NA

Preparing activity:
Army – CR

Agent:
DLA – CC

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NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at http://assist.daps.dla.mil