

INCH-POUND

MIL-PRF-914A
 AMENDMENT 2
 11 August 2000
 SUPERSEDING
 AMENDMENT 1
 19 December 1997

PERFORMANCE SPECIFICATION

RESISTORS NETWORKS, FIXED, FILM, SURFACE MOUNT,
 NONESTABLISHED RELIABILITY, AND ESTABLISHED RELIABILITY,
 GENERAL SPECIFICATION FOR

This amendment forms a part of MIL-PRF-914A, dated 3 July 1997, and is approved for use by all Departments and Agencies of the Department of Defense.

PAGE 2

TABLE I, delete and substitute.

"TABLE I. Characteristics.

Test or condition	Characteristics						Units
	R	V	H	K	M	C 1/	
Resistance-temperature characteristic (see 3.13)	±25	±50	±50	±100	±300	±50	ppm/°C
Tracking to the reference element	±5	±5	<u>2/</u>	<u>2/</u>	<u>2/</u>	±5	
Maximum ambient temperature at rated wattage (see 3.6)	70	70	70	70	70	70	°C
Maximum ambient temperature at zero power derating (see figure 1)	125	125	125	125	125	125	
Maximum ambient temperature at rated wattage (see 3.6)	70	70	70	70	70	70	Maximum percent change in resistance (0.01 ohm additional allowed for measurement error). When applicable maximum percent change in resistance ratio.
Maximum ambient temperature at zero power derating (see figure 1)	125	125	125	125	125	125	
Thermal shock (see 3.8) and Power conditioning (see 3.9)	ΔR ±.25 $\Delta Ratio$ ±.03	±.25 ±.03	±.50 <u>3/</u>	±.70 <u>3/</u>	±.70 <u>3/</u>	±.25 ±.03	
Thermal shock (see 3.8)	ΔR ±.15 $\Delta Ratio$ ±.03	±.15 ±.03	±.25 <u>3/</u>	±.50 <u>3/</u>	±.50 <u>3/</u>	±.15 ±.03	
Low temperature operation (see 3.14)	ΔR ±.10 $\Delta Ratio$ ±.02	±.10 ±.02	±.10 <u>3/</u>	±.25 <u>3/</u>	±.50 <u>3/</u>	±.10 ±.02	

See footnotes at end of table.

MIL-PRF-914A
AMENDMENT 2

TABLE I. Characteristics – Continued.

Test or condition	Characteristics							Units
	R	V	H	K	M	C <u>1/</u>		
Short-time overload (see 3.15) ΔR $\Delta Ratio$	$\pm .10$ $\pm .02$	$\pm .10$ $\pm .02$	$\pm .10$ <u>3/</u>	$\pm .25$ <u>3/</u>	$\pm .50$ <u>3/</u>	$\pm .10$ $\pm .02$	Maximum percent change in resistance (0.01 ohm additional allowed for measurement error). When applicable maximum percent change in resistance ratio.	
Terminal strength (see 3.17) ΔR $\Delta Ratio$	$\pm .10$ $\pm .03$	$\pm .10$ $\pm .03$	$\pm .25$ <u>3/</u>	$\pm .25$ <u>3/</u>	$\pm .25$ <u>3/</u>	$\pm .10$ $\pm .03$		
Resistance to bonding exposure (see 3.20) ΔR $\Delta Ratio$	$\pm .25$ $\pm .02$	$\pm .25$ $\pm .02$	$\pm .25$ <u>3/</u>	$\pm .25$ <u>3/</u>	$\pm .25$ <u>3/</u>	$\pm .25$ $\pm .02$		
Moisture resistance (see 3.21) ΔR $\Delta Ratio$	$\pm .20$ $\pm .02$	$\pm .20$ $\pm .02$	$\pm .40$ <u>3/</u>	$\pm .50$ <u>3/</u>	$\pm .50$ <u>3/</u>	$\pm .20$ $\pm .02$		
Shock, specified pulse (see 3.22) ΔR $\Delta Ratio$	$\pm .25$ $\pm .03$	$\pm .25$ $\pm .03$	$\pm .25$ <u>3/</u>	$\pm .25$ <u>3/</u>	$\pm .25$ <u>3/</u>	$\pm .25$ $\pm .03$		
Vibration, high frequency (see 3.23) ΔR $\Delta Ratio$	$\pm .25$ $\pm .03$	$\pm .25$ $\pm .03$	$\pm .25$ <u>3/</u>	$\pm .25$ <u>3/</u>	$\pm .25$ <u>3/</u>	$\pm .25$ $\pm .03$		
Life (see 3.24.1) ΔR $\Delta Ratio$	$\pm .50$ $\pm .03$	$\pm .50$ $\pm .03$	$\pm .50$ <u>3/</u>	$\pm .50$ <u>3/</u>	± 2.0 <u>3/</u>	$\pm .50$ $\pm .03$		
FR level	± 2.0							
High temperature Exposure (see 3.25) ΔR $\Delta Ratio$	$\pm .10$ $\pm .03$	$\pm .10$ $\pm .03$	$\pm .20$ <u>3/</u>	$\pm .50$ <u>3/</u>	± 1.0 <u>3/</u>	$\pm .10$ $\pm .03$		
Low temperature storage (see 3.26) ΔR $\Delta Ratio$	$\pm .10$ $\pm .02$	$\pm .10$ $\pm .02$	$\pm .10$ <u>3/</u>	$\pm .25$ <u>3/</u>	$\pm .50$ <u>3/</u>	$\pm .10$ $\pm .02$		
Steady-state humidity (see 3.28) ΔR $\Delta Ratio$	$\pm .20$ $\pm .02$	$\pm .20$ $\pm .02$	$\pm .40$ <u>3/</u>	$\pm .50$ <u>3/</u>	$\pm .50$ <u>3/</u>	$\pm .20$ $\pm .02$		
Insulation resistance (see 3.19)	10,000	10,000	10,000	10,000	10,000	10,000		megohms
Resistance, tolerance and, when applicable, resistance ratio accuracy (see table VIII) <u>4/</u>	B D F	B D F	B D F	D F G J	F G J	B D F		\pm percent

1/ Hermetically sealed resistor network (see 3.27).

2/ Not applicable.

3/ Delta ratio are not applicable.

4/ See 3.10.3.

4.5h, delete "P" and substitute "M".

MIL-PRF-914A
AMENDMENT 2

PAGE 41

6.2c, delete and substitute.

“c. Packaging requirements (e.g., Electrostatic discharge (ESD) sensitivity) (see 5.1).”

PAGE 42

A.3.1, delete “P” and substitute “M”.

Custodians:

Army - CR
Navy - EC
Air Force - 11

Preparing activity:

Army - CR

Agent:

DLA - CC

Review activities:

Army - AR, AT, AV, CR4, MI
Navy - AS, CG, MC, OS
Air Force - 19
NASA - NA

(Project 5905-1589)