

MILITARY SPECIFICATION
RESISTOR, VARIABLE, COMPOSITION
GENERAL SPECIFICATION FOR

This amendment forms a part of MIL-R-94E, dated 10 September 1992, and is approved for use by all Departments and Agencies of the Department of Defense.

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TABLE IV, delete and substitute:

"TABLE IV. Style of operating shaft.

Symbol	Shaft
F	Flatted
S	Slotted

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After 3.4.5, add the following new paragraph:

"3.4.5.1 Tin plated finishes. Use of tin plating is prohibited as a final finish and as an undercoat (see 6.15.1). Use of tin-lead (Sn-Pb) finishes are acceptable provided that the minimum lead content is 3 percent."

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4.5.1.1, delete in its entirety and substitute:

"4.5.1.1 Inspection and production lot.

"4.5.1.1.1 Inspection lot. An inspection lot, as far as practicable, shall consist of all resistors of the same style, regardless of the resistance value, produced in a period not to exceed 30 days, produced under essentially the same conditions, and offered for inspection at one time.

"4.5.1.1.2 Production lot. A production lot shall consist of all resistors of the same style, nominal resistance value, and resistance tolerance. Manufacture of all parts in the lot shall have been started, processed, assembled, and tested as a group. Lot identity shall be maintained throughout the manufacturing process."

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4.5.1.2.1.3.2a., after first sentence, add:

"Five samples shall be selected from each production lot that formed the failed inspection lot."

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4.5.1.2.1.3.2b., last sentence, delete and substitute:

"If the lot fails this solderability test the lot may be reworked a second time and retested. If the lot fails the second rework, the lot shall be considered rejected and shall not be furnished against the requirements of the specification."

6.13, end of last sentence, add: "and table XVII-1 herein."

Before table XVIII, add the following new table:

"TABLE XVII-1. Performance requirements.

Style	RV2	RV4	RV5	RV6	RV7		RV8
Maximum ambient temperature at rated wattage (see figure 6)	70°C	70°C	70°C	70°C	70°C		70°C
Maximum ambient temperature at zero rated wattage derating (see figure 6)	120°C	120°C	120°C	120°C	120°C		120°C
Power rating in watts Taper A (see 3.5.3.1) Tapers C and F (see 3.5.3.2)	1.0 0.5	2.0 1.0	0.5 0.25	0.5 0.25	panel 0-2.0	rear 1.6-0	0.5 0.25
Maximum percent change in resistance:							
Rotational life (see 3.10)	10	10	10	10	10		10
Load life (see 3.12)	10	10	10	10	10		10
Moisture resistance (see 3.13)	6 average 10 maximum		6 average 10 maximum				
Low temperature storage (see 3.14)	2	2	2	2	2		2
Low temperature operation (see 3.15)	3	3	3	3	3		3
Thermal shock (see 3.16)	6	4	6	4	4		4
Shock (specified pulse) (see 3.18)	2	2	2	2	2		2
Vibration, high frequency (see 3.19)	2	2	2	2	2		2
Insulation resistance (after moisture resistance (see 3.13))	100 megohms	100 megohms	100 megohms	100 megohms	100 megohms		100 megohms
Resistance tolerance ±percent (see table V)	10 and 20		10 and 20				

After 6.15, add the following new paragraph:

"6.15.1 Tin plated finishes. Tin plating is prohibited (see 3.4.5.1) since it may result in tin whisker growth. Tin whisker growth could adversely affect the operation of electronic equipment systems. For additional information on this matter refer to ASTM B545 (Standard Specification for Electrodeposited Coating of Tin)."

MIL-R-94E
AMENDMENT 1

CONCLUDING MATERIAL

Custodians:

Army - ER
Navy - EC
Air Force - 85
NASA - NA

Review activities:

Army - AR, HI
Navy - AS, OS
Air Force - 17, 99
DLA - ES

User activities:

Army - AT, AV, ME
Navy - MC, CG
Air Force - 19

Preparing activity:

Army - ER

Agent:

DLA - ES

(Project 5905-1324)