

2.2 Government documents.

2.2.1 Specifications, standards, and handbooks. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto, cited in the solicitation (see 6.2).

SPECIFICATION

DEPARTMENT OF DEFENSE

MIL-PRF-22684 - Resistors, Fixed, Film (Insulated), General Specification.

STANDARDS

DEPARTMENT OF DEFENSE

MIL-STD-202 - Test Methods for Electronic and Electrical Component Parts.

MIL-STD-1285 - Marking of Electrical and Electronic Parts.

(Unless otherwise indicated, copies of the above specifications, standards, and handbooks are available from the Document Automation and Production Service, Building 4D (DPM-DoDSSP), 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

2.3 Order of precedence. In the event of a conflict between the text of this document and the references cited herein (except for related association specification, specification sheets, or MS standards), the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 General. The requirements for acquiring the product described herein shall consist of this document and MIL-PRF-22684.

3.2 Interface and physical dimensions. Resistors shall meet the interface and physical dimensions specified on figure 1, as applicable.

3.3 Power rating. The power rating shall be 1/2 watt based on full load operation at an ambient temperature of 70°C.

3.4 Voltage rating. The maximum continuous working voltage shall not exceed 350 volts.

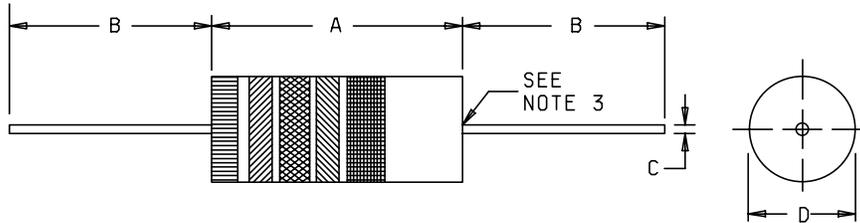
3.5 Resistance values and resistance tolerances. The minimum and maximum standard resistance values and associated resistance tolerances shall be as listed in table I.

3.6 Terminal type. The terminal type available shall be in accordance with MIL-PRF-22684 and table I.

3.7 Dielectric withstanding voltage. Resistors shall be tested as specified in MIL-PRF-22684. The magnitude of test voltage shall be as follows:

Atmospheric pressure - 700 volts rms.
Barometric pressure - 400 volts rms.

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Ltr	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.283	0.416	7.19	10.57
B	1.375	1.625	34.92	41.28
C	.026	0.036	0.66	0.91
D	0.108	0.161	2.74	4.09

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. The end of the body shall be that point at which the diameter equals the nearest drill size larger than 250 percent of the nominal lead diameter. The leads shall be solderable to within .125 inch (3.18 mm) of the resistor body.

FIGURE 1. Configuration and dimensions.

3.8 Insulation resistance. Resistors shall be tested as specified in MIL-PRF-22684 except the insulation resistance shall be not less than 100 megohms.

3.9 Moisture resistance. Resistors shall be tested as specified in MIL-PRF-22684 except the change in resistance shall not exceed 1.5 percent.

3.10 Life. Resistors shall be tested as specified in MIL-PRF-22684 except the change in resistance shall not exceed 2.0 percent.

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Table I. PIN designation.

Type Designation	Nominal total resistance value	Resistance tolerance (percent)	Terminal	Dash No.	Type Designation	Nominal total resistance value	Resistance tolerance (percent)	Terminal	Dash No.
	<u>Ohms</u>					<u>Ohms</u>			
RL20S4R3G	4.3	G	S	0227	RL20S510G	51	G	S	0035
RL20S4R3J	4.3	J	S	0228	RL20S510J	51	J	S	0036
RL20S4R7G	4.7	G	S	0229	RL20S560G	56	G	S	0037
RL20S4R7J	4.7	J	S	0230	RL20S560J	56	J	S	0038
RL20S5R1G	5.1	G	S	0231	RL20S620G	62	G	S	0039
RL20S5R1J	5.1	J	S	0232	RL20S620J	62	J	S	0040
RL20S5R6G	5.6	G	S	0233	RL20S680G	68	G	S	0041
RL20S5R6J	5.6	J	S	0234	RL20S680J	68	J	S	0042
RL20S6R2G	6.2	G	S	0235	RL20S750G	75	G	S	0043
RL20S6R2J	6.2	J	S	0236	RL20S750J	75	J	S	0044
RL20S6R8G	6.8	G	S	0237	RL20S820G	82	G	S	0045
RL20S6R8J	6.8	J	S	0238	RL20S820J	82	J	S	0046
RL20S7R5G	7.5	G	S	0239	RL20S910G	91	G	S	0047
RL20S7R5J	7.5	J	S	0240	RL20S910J	91	J	S	0048
RL20S8R2G	8.2	G	S	0241	RL20S101G	100	G	S	0049*
RL20S8R2J	8.2	J	S	0242	RL20S101J	100	J	S	0050
RL20S9R1G	9.1	G	S	0243	RL20S111G	110	G	S	0051
RL20S9R1J	9.1	J	S	0244	RL20S111J	110	J	S	0052
RL20S100G	10	G	S	0001	RL20S121G	120	G	S	0053
RL20S100J	10	J	S	0002	RL20S121J	120	J	S	0054
RL20S110G	11	G	S	0003	RL20S131G	130	G	S	0055
RL20S110J	11	J	S	0004	RL20S131J	130	J	S	0056
RL20S120G	12	G	S	0005	RL20S151G	150	G	S	0057
RL20S120J	12	J	S	0006	RL20S151J	150	J	S	0058
RL20S130G	13	G	S	0007	RL20S161G	160	G	S	0059
RL20S130J	13	J	S	0008	RL20S161J	160	J	S	0060
RL20S150G	15	G	S	0009	RL20S181G	180	G	S	0061
RL20S150J	15	J	S	0010	RL20S181J	180	J	S	0062
RL20S160G	16	G	S	0011	RL20S201G	200	G	S	0063
RL20S160J	16	J	S	0012	RL20S201J	200	J	S	0064
RL20S180G	18	G	S	0013	RL20S221G	220	G	S	0065
RL20S180J	18	J	S	0014	RL20S221J	220	J	S	0066
RL20S200G	20	G	S	0015	RL20S241G	240	G	S	0067
RL20S200J	20	J	S	0016	RL20S241J	240	J	S	0068
RL20S220G	22	G	S	0017	RL20S271G	270	G	S	0069
RL20S220J	22	J	S	0018	RL20S271J	270	J	S	0070
RL20S240G	24	G	S	0019	RL20S301G	300	G	S	0071
RL20S240J	24	J	S	0020	RL20S301J	300	J	S	0072
RL20S270G	27	G	S	0021	RL20S331G	330	G	S	0073
RL20S270J	27	J	S	0022	RL20S331J	330	J	S	0074
RL20S300G	30	G	S	0023	RL20S361G	360	G	S	0075
RL20S300J	30	J	S	0024	RL20S361J	360	J	S	0076
RL20S330G	33	G	S	0025	RL20S391G	390	G	S	0077
RL20S330J	33	J	S	0026	RL20S391J	390	J	S	0078
RL20S360G	36	G	S	0027	RL20S431G	430	G	S	0079
RL20S360J	36	J	S	0028	RL20S431J	430	J	S	0080
RL20S390G	39	G	S	0029	RL20S471G	470	G	S	0081
RL20S390J	39	J	S	0030	RL20S471J	470	J	S	0082
RL20S430G	43	G	S	0031	RL20S511G	510	G	S	0083
RL20S430J	43	J	S	0032	RL20S511J	510	J	S	0084
RL20S470G	47	G	S	0033	RL20S561G	560	G	S	0085
RL20S470J	47	J	S	0034	RL20S561J	560	J	S	0086

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Table I. PIN designation - continued.

Type Designation	Nominal total resistance value	Resistance tolerance (percent)	Terminal	Dash No.	Type Designation	Nominal total resistance value	Resistance tolerance (percent)	Terminal	Dash No.
	<u>Ohms</u>					<u>Ohms</u>			
RL20S621G	620	G	S	0087	RL20S752G	7,500	G	S	0139
RL20S621J	620	J	S	0088	RL20S752J	7,500	J	S	0140
RL20S681G	680	G	S	0089	RL20S822G	8,200	G	S	0141
RL20S681J	680	J	S	0090	RL20S822J	8,200	J	S	0142
RL20S751G	750	G	S	0091	RL20S912G	9,100	G	S	0143
RL20S751J	750	J	S	0092	RL20S912J	9,100	J	S	0144
RL20S821G	820	G	S	0093	RL20S103G	10,000	G	S	0145
RL20S821J	820	J	S	0094	RL20S103J	10,000	J	S	0146
RL20S911G	910	G	S	0095	RL20S113G	11,000	G	S	0147
RL20S911J	910	J	S	0096	RL20S113J	11,000	J	S	0148
RL20S102G	1,000	G	S	0097	RL20S123G	12,000	G	S	0149
RL20S102J	1,000	J	S	0098	RL20S123J	12,000	J	S	0150
RL20S112G	1,100	G	S	0099	RL20S133G	13,000	G	S	0151
RL20S112J	1,100	J	S	0100	RL20S133J	13,000	J	S	0152
RL20S122G	1,200	G	S	0101	RL20S153G	15,000	G	S	0153
RL20S122J	1,200	J	S	0102	RL20S153J	15,000	J	S	0154
RL20S132G	1,300	G	S	0103	RL20S163G	16,000	G	S	0155
RL20S132J	1,300	J	S	0104	RL20S163J	16,000	J	S	0156
RL20S152G	1,500	G	S	0105	RL20S183G	18,000	G	S	0157
RL20S152J	1,500	J	S	0106	RL20S183J	18,000	J	S	0158
RL20S162G	1,600	G	S	0107	RL20S203G	20,000	G	S	0159
RL20S162J	1,600	J	S	0108	RL20S203J	20,000	J	S	0160
RL20S182G	1,800	G	S	0109	RL20S223G	22,000	G	S	0161
RL20S182J	1,800	J	S	0110	RL20S223J	22,000	J	S	0162
RL20S202G	2,000	G	S	0111	RL20S243G	24,000	G	S	0163
RL20S202J	2,000	J	S	0112	RL20S243J	24,000	J	S	0164
RL20S222G	2,200	G	S	0113	RL20S273G	27,000	G	S	0165
RL20S222J	2,200	J	S	0114	RL20S273J	27,000	J	S	0166
RL20S242G	2,400	G	S	0115	RL20S303G	30,000	G	S	0167
RL20S242J	2,400	J	S	0116	RL20S303J	30,000	J	S	0168
RL20S272G	2,700	G	S	0117	RL20S333G	33,000	G	S	0169
RL20S272J	2,700	J	S	0118	RL20S333J	33,000	J	S	0170
RL20S302G	3,000	G	S	0119	RL20S363G	36,000	G	S	0171
RL20S302J	3,000	J	S	0120	RL20S363J	36,000	J	S	0172
RL20S332G	3,300	G	S	0121	RL20S393G	39,000	G	S	0173
RL20S332J	3,300	J	S	0122	RL20S393J	39,000	J	S	0174
RL20S362G	3,600	G	S	0123	RL20S433G	43,000	G	S	0175
RL20S362J	3,600	J	S	0124	RL20S433J	43,000	J	S	0176
RL20S392G	3,900	G	S	0125	RL20S473G	47,000	G	S	0177
RL20S392J	3,900	J	S	0126	RL20S473J	47,000	J	S	0178
RL20S432G	4,300	G	S	0127	RL20S513G	51,000	G	S	0179
RL20S432J	4,300	J	S	0128	RL20S513J	51,000	J	S	0180
RL20S472G	4,700	G	S	0129	RL20S563G	56,000	G	S	0181
RL20S472J	4,700	J	S	0130	RL20S563J	56,000	J	S	0182
RL20S512G	5,100	G	S	0131	RL20S623G	62,000	G	S	0183
RL20S512J	5,100	J	S	0132	RL20S623J	62,000	J	S	0184
RL20S562G	5,600	G	S	0133	RL20S683G	68,000	G	S	0185
RL20S562J	5,600	J	S	0134	RL20S683J	68,000	J	S	0186
RL20S622G	6,200	G	S	0135	RL20S753G	75,000	G	S	0187
RL20S622J	6,200	J	S	0136	RL20S753J	75,000	J	S	0188
RL20S682G	6,800	G	S	0137	RL20S823G	82,000	G	S	0189
RL20S682J	6,800	J	S	0138	RL20S823J	82,000	J	S	0190
					RL20S913G	91,000	G	S	0191
					RL20S913J	91,000	J	S	0192

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Table I. PIN designation - continued.

Type Designation	Nominal total resistance value	Resistance tolerance (percent)	Terminal	Dash No.	Type Designation	Nominal total resistance value	Resistance tolerance (percent)	Terminal	Dash No.
	<u>Megohm</u>					<u>Megohm</u>			
RL20S104G	0.10	G	S	0193	RL20S244G	0.24	G	S	0211
RL20S104J	0.10	J	S	0194	RL20S244J	0.24	J	S	0212
RL20S114G	0.11	G	S	0195	RL20S274G	0.27	G	S	0213
RL20S114J	0.11	J	S	0196	RL20S274J	0.27	J	S	0214
RL20S124G	0.12	G	S	0197	RL20S304G	0.30	G	S	0215
RL20S124J	0.12	J	S	0198	RL20S304J	0.30	J	S	0216
RL20S134G	0.13	G	S	0199	RL20S334G	0.33	G	S	0217
RL20S134J	0.13	J	S	0200	RL20S334J	0.33	J	S	0218
RL20S154G	0.15	G	S	0201	RL20S364G	0.36	G	S	0219
RL20S154J	0.15	J	S	0202	RL20S364J	0.36	J	S	0220
RL20S164G	0.16	G	S	0203	RL20S394G	0.39	G	S	0221
RL20S164J	0.16	J	S	0204	RL20S394J	0.39	J	S	0222
RL20S184G	0.18	G	S	0205	RL20S434G	0.43	G	S	0223
RL20S184J	0.18	J	S	0206	RL20S434J	0.43	J	S	0224
RL20S204G	0.20	G	S	0207	RL20S474G	0.47	G	S	0225
RL20S204J	0.20	J	S	0208	RL20S474J	0.47	J	S	0226
RL20S224G	0.22	G	S	0209					
RL20S224J	0.22	J	S	0210					

4. VERIFICATION

4.1 Sampling and inspection. Sampling and inspection procedures shall be in accordance with Group A inspection and Group B inspection of MIL-PRF-22684 and as specified herein.

5. PACKAGING

5.1 Packaging. For acquisition purposes the packaging requirements shall be as specified in the contract or purchase order. When actual packaging of materiel is to be performed by DoD personnel, these personnel need to contact the responsible packaging activity to ascertain requisite packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activity within the Military Department or Defense Agency, or within the Military Department's System Command. Packaging data retrieval is available from the managing Military Department's or Defense Agency's automated packaging files, CD-ROM products, or by contacting the responsible packaging activity.

6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

6.1 Notes The notes specified in MIL-PRF-22684 are applicable to this specification.

6.2 Acquisition requirements. Acquisition documents must specify the following:

- a. Title, number, date of this specification, and complete PIN (see 1.2).
- b. Issue of DoDISS to be cited in the solicitation, and if required, the specific issue of individual documents referenced (see 2.2).
- c. Packaging requirements.

6.3 Changes from previous issue. Asterisks are not used in this revision to identify changes with respect to the previous issue due to the extensiveness of the changes.

Custodians:

Army - CR
Navy - EC
Air Force - 11
DLA - CC

Preparing activity:

DLA - CC

(Project 5905-1629-02)

Review activities:

Army - AR, MI