

IS-38

EIA INTERIM STANDARD

Radial Lead Capacitors (Conformally Coated)

IS-38

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ELECTRONIC INDUSTRIES ASSOCIATION
ENGINEERING DEPARTMENT



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EIA STANDARD SPECIFICATION SHEET

FOR

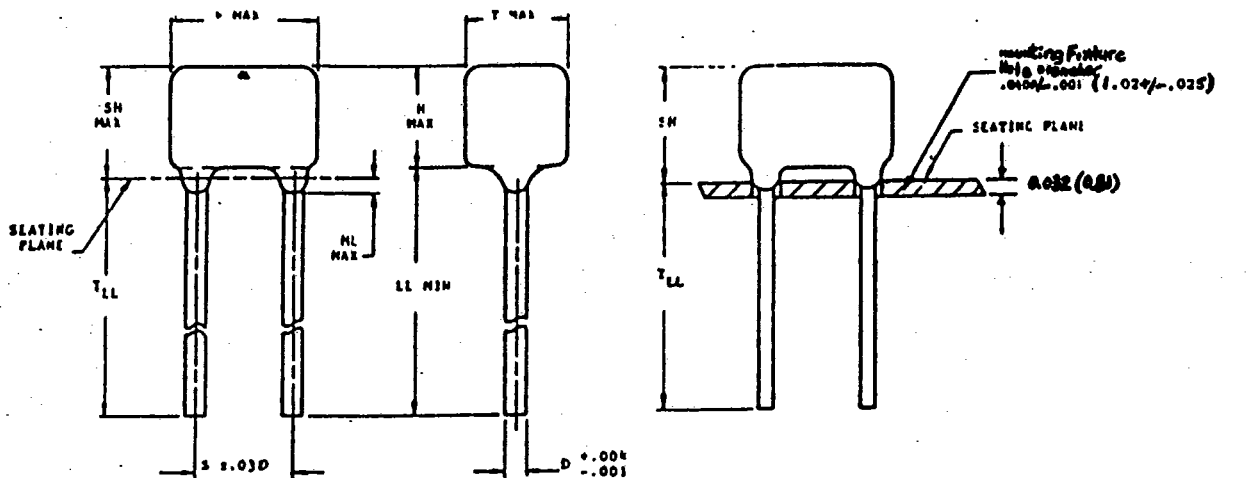
SINGLE AND MULTIPLE LAYER, ENCAPSULATED CERAMIC DIELECTRIC
RADIAL LEAD CAPACITORS, CONFORMALLY COATED

FIGURE 1

STYLE	W-MAX	H-MAX	T-MAX	S ± .030(.76)	SH-MAX	+ .004(.10) D - .001(.02)
CC 1515	.150(3.81)	.150(3.81)	.100(2.54)	.100(2.54)	.180(4.57)	.020(.51)
CC 2020	.200(5.08)	.200(5.08)	.125(3.18)	.100(2.54)	.230(5.84)	.020(.51)
CC 3030	.300(7.62)	.300(7.62)	.150(3.81)	.200(5.08)	.330(8.38)	.020(.51)
CC 4040	.400(10.16)	.400(10.16)	.150(3.81)	.200(5.08)	.475(12.07)	.025(.64)
CC 5050	.500(12.70)	.500(12.70)	.200(5.08)	.400(10.16)	.530(13.46)	.025(.64)

- NOTES:
- (1) RC - Radial Conformal Coated
 - (2) All dimensions - inches (mm)
 - (3) Maximum allowable meniscus .032 (.81) as measured in mounting fixture
 - (4) Other sizes, lead spacings, and crimp leads are available. See figures 2 and 3. Consult suppliers for details.

IS-38
Page 2

Requirements:

Type: Encapsulated, ceramic dielectric capacitor radial leaded, with copper or copper-clad wire leads having tin or tin-lead alloy coating.

Dimension and Configuration: See Figure 1.

Available Characteristics: See Tables II, III, IV.

Operating Temperature Range: See Table I.

Capacitance Values: Tables II, III, IV or V in accordance with RS-198-C-1.

Dissipation Factor (or Q): See Table I and Figure 1 in accordance with RS-198-C-1

Dielectric Strength: 250% of rated voltage in accordance RS-198-C-1.

Insulation Resistance: See Table I in accordance with RS-198-C-1.

Body Insulation: 500 Vdc in accordance with RS-198-C-1.

Capacitance Values, Tolerances and Voltages:

- (1) NPO TABLE II
- (2) X7R Table III
- (3) Z5U Table IV

Environmental Requirements:

- (1) The temperature coefficient of capacitance or characteristics as shown in Table I shall be as specified in RS-198-C-1.
- (2) When seal tested to RS-198-C-1, capacitors shall meet the capacitance change, the Q (dissipation factor) and insulation resistance requirement of Table I.
- (3) When life tested per RS-198-C-1, the units shall meet the capacitance change, Q (dissipation factor) and insulation resistance requirements of Table I.

TABLE I

Characteristics	Operating Temp. Range	Max. Cap Change	Max. % DF or Q		Minimum Insulation Resistance ($G\Omega$ or $R.C.$ Product whichever is less)	
			Initial	Post Seal Life Test	Initial	Post Seal Life Test
COG/NPO	-55 to +125°C	$\pm 3\%$ or* .25pf	0.1% OR 1000	0.5% OR 200	100G Ω or 1000 ΩF	10G Ω or 100 ΩF
X7R	-55 to +125°C	$\pm 20\%$	3%	3%		
Z5U	+10 to +85°C	$\pm 30\%$	4%	4%	10G Ω or 1000 ΩF	1G Ω or 100 ΩF