



EIA-580AA00

EIA SPECIFICATION

Blank Detail Specification for Fixed Metallized Polyethylene- Terephthalate Film Dielectric Chip Capacitors for Direct Current - Encapsulated

EIA-580AA00

DECEMBER 1991

ELECTRONIC INDUSTRIES ASSOCIATION
ENGINEERING DEPARTMENT



Approved For Use In
The NECQ System



Obtained From
GLOBAL ENGINEERING DOCUMENTS
2805 McGraw Ave., Irvine, CA 92714
(714) 261-1455 (800) 854-7179



Documents

Document Sharing Hub

NOTICE

EIA Engineering Standards and Publications are designed to serve the public interest through eliminating misunderstandings between manufacturers and purchasers, facilitating interchangeability and improvement of products, and assisting the purchaser in selecting and obtaining with minimum delay the proper product for his particular need. Existence of such Standards and Publications shall not in any respect preclude any member or non-member of EIA from manufacturing or selling products not conforming to such Standards and Publications, nor shall the existence of such Standards and Publications preclude their voluntary use by those other than EIA members, whether the standard is to be used either domestically or internationally.

Recommended Standards and Publications are adopted by EIA without regard to whether their adoption may involve patents on articles, materials, or processes. By such action, EIA does not assume any liability to any patent owner, nor does it assume any obligation whatever to parties adopting the Recommended Standard or Publication.

This EIA Specification is considered to have International Standardization implication, but the International Electrotechnical Commission activity has not progressed to the point where a valid comparison between the EIA Specification and the IEC document can be made.

This Specification does not purport to address all safety problems associated with its use or all applicable regulatory requirements. It is the responsibility of the user of this Specification to establish appropriate safety and health practices and to determine the applicability of regulatory limitations before its use.

(From Standards Proposal No. 2356 formulated under the cognizance of P-2.2 Subcommittee on Plastic and Paper Dielectric)

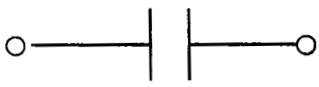
Published by

ELECTRONIC INDUSTRIES ASSOCIATION
Engineering Department
2001 Pennsylvania Avenue N.W.
Washington, D.C. 20006

**PRICE: Please refer to the current
Catalog of EIA & JEDEC STANDARDS & ENGINEERING PUBLICATIONS
or call Global Engineering Documents, USA and Canada (1-800-854-7179)
International (714-261-1455)**

Copyright 1991

All rights reserved
Printed in U.S.A.

ELECTRONIC INDUSTRIES ASSOCIATION	QC 30...../US..... EIA-580A000
ELECTRONIC COMPONENTS OF ASSESSED QUALITY IN ACCORDANCE WITH: QC 300000 (IEC 384-1) EIA-5800000	QC 3-..... EIA-580AA00
OUTLINE DRAWING: (SEE TABLE 1)	FIXED METALLIZED POLYETHY- LENETEREPHTHALATE FILM DIELECTRIC CHIP CAPACITORS FOR DIRECT CURRENT - ENCAPSULATED
	ELECTRICAL CIRCUIT 
	ASSESSMENT LEVEL: E

INFORMATION ABOUT MANUFACTURERS WHO HAVE COMPONENTS QUALIFIED TO THIS DETAIL SPECIFICATION IS AVAILABLE IN THE QUALIFIED PRODUCTS LIST.

(Approved for use as a provisional Specification in the IECQ System.)

1. PART ONE - GENERAL DATA1.1 Recommended Method of Mounting

These components can have the terminals attached to conventional substrates by conventional techniques such as vapor-phase, reflow or wave soldering. A soldering iron is not recommended due to the difficulty of consistently controlling temperature and time at temperature.

1.2 DimensionsTable 1

Case Size Reference	Dimensions (mm)				
	$L_1 \pm .3$	$W_1 \pm .3$	$H_1 \pm .3$	$L_2 \pm .3$	$W_2 \pm .5$
4945 (A)	4.9	4.5	2.5	.8	3.0
4955 (B)	4.9	5.5	3.0	.8	3.0
7350 (C)	7.3	5.0	3.0	.8	3.0
7355 (D)	7.3	5.5	3.0	.8	3.0
7365 (E)	7.3	6.5	3.5	.8	3.0
7370 (F)	7.3	7.0	4.0	.8	3.0
9675 (G)	9.6	7.5	4.5	.8	3.0

1.3 Ratings and Characteristics

Capacitance Range (C_R):	.001 to 1.0 μF See Table 2
Tolerance on Rated Capacitance:	$\pm 5\%$, $\pm 10\%$ and $\pm 20\%$
Rated Voltage (U_C):	See Table 2
Category Voltage (U_C):	Above $85^\circ C$, Reduce U_R $1.25\%/^\circ C$
Climatic Category:	-55/100/21
Rated Temperature:	-55° to $85^\circ C$
Max. AC Voltage:	30 VAC (combined peak ac and dc must not exceed rated voltage).

1.3 Ratings and Characteristics (Cont'd)

Max. Pulse Rise Time:	dv/dt = 50 volts μ s
Dissipation Factor:	1.0% Max. @ 1 kHz @ 25°C. 1.5% Max. @ 10 kHz @ 25°C.
Insulation Resistance:	Measured at 10 VDC @ 25°C after 1 minute. 3750 M Ω minimum value.
Self Inductance:	Approximately 5 nH
Terminations:	Solderable
Enclosure:	Cast or Molded

Table 2Values of Capacitance and of Voltage Related to Case Size

RATED VOLTAGE (U_R)	50 VDC	
RATED CAPACITANCE (C_R) μ F	CASE SIZE	
.0010	4945 (A),	7350 (C)
.0015		
.0022		
.0033		
.0047		
.0068		
.010		
.015		
.022		
.033		
.047		
.068	4955 (B),	7350 (C)
.10		
.15	7350 (C),	7355 (D)
.22		
.33	7365 (E),	7370 (F)
.47		
.68	9675 (G)	
1.0		