INCH-POUND
MIL-PRF-23269/2K
14 October 2022
SUPERSEDING
MIL-PRF-23269/2J
15 November 2016

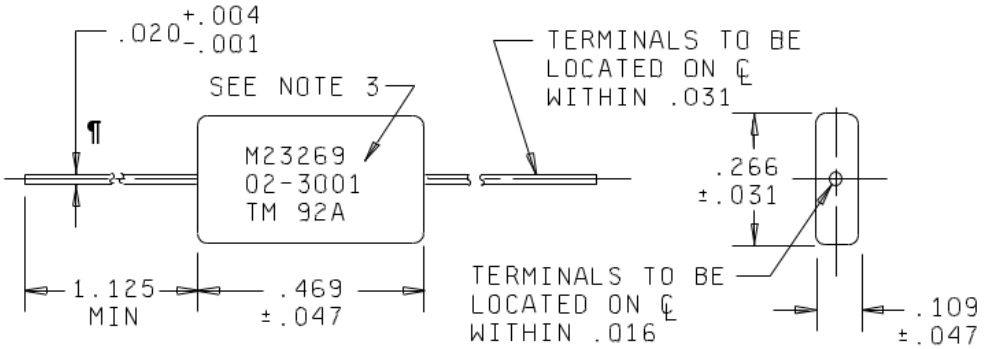
PERFORMANCE SPECIFICATION SHEET

CAPACITOR, FIXED, GLASS DIELECTRIC, (AXIAL WIRE-LEAD TERMINALS), STYLE CYR15

Inactive for new design after November 15, 2016

This specification sheet is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and MIL-PRF-23269.



Inches	mm	Inches	mm
.001	0.03	.047	1.19
.004	0.10	.109	2.77
.016	0.41	.266	6.76
.020	0.51	.469	11.91
.031	0.79	1.125	28.58

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are in millimeters and are given for general information only.
3. See marking requirement.

FIGURE 1. Dimensions and configurations.

DISTRIBUTION STATEMENT A. Approved for public release. Distribution is unlimited.

REQUIREMENTS:

Dimensions and configuration: See figure 1.

Case material: Glass.

Terminals: Solderable.

Capacitance (nominal): See table I.

Capacitance tolerance: See table I.

Rated temperature: -55°C to +125°C.

Temperature coefficient: 140 parts per million (ppm)/°C ±25 ppm/°C.

Capacitance drift: 0.1 percent or 0.1 pF, whichever is greater.

Seal: Hermetic.

Seal: Test I of MIL-PRF-23269.

Insulation resistance: 10,000 megohms or 200-ohm-farads minimum (first article inspection only at +125°C). 100,000 megohms minimum (at +25°C).

Dissipation factor (DF): 0.1 percent maximum.

Thermal shock and moisture resistance:

DF: 0.1 percent maximum.

Quality factor (Q): In accordance with MIL-PRF-23269.

Life:

ΔCapacitance (240 hours and 1,000 hours): 0.5 percent maximum.

DF (240 hours and 1,000 hours): 0.15 percent maximum.

Marking: "M" Part or Identifying Number (PIN)

M23269
02-1001
TM 09A

Trademark — Year code — Sequential 4 week lot code

Substitutability data: See table II.

TABLE I. Electrical characteristics with dash numbers. 1/

Dash number M23269/02-		Capacitance (pF)	Capacitance tolerance	Dash number M23269/02-		Capacitance (pF)	Capacitance tolerance
500 V_{dc}	100 V_{dc}			300 V_{dc}	100 V_{dc}		
1001	8001	220	±1%	1031	8031	560	±1%
1002	8002	220	±2%	1032	8032	560	±2%
1003	8003	220	±5%	1033	8033	560	±5%
1004	8004	240	±1%	1034	8034	620	±1%
1005	8005	240	±2%	1035	8035	620	±2%
1006	8006	240	±5%	1036	8036	620	±5%
1007	8007	270	±1%	1037	8037	680	±1%
1008	8008	270	±2%	1038	8038	680	±2%
1009	8009	270	±5%	1039	8039	680	±5%
1010	8010	300	±1%	1040	8040	750	±1%
1011	8011	300	±2%	1041	8041	750	±2%
1012	8012	300	±5%	1042	8042	750	±5%
1013	8013	330	±1%	1043	8043	820	±1%
1014	8014	330	±2%	1044	8044	820	±2%
1015	8015	330	±5%	1045	8045	820	±5%
1016	8016	360	±1%	1046	8046	910	±1%
1017	8017	360	±2%	1047	8047	910	±2%
1018	8018	360	±5%	1048	8048	910	±5%
1019	8019	390	±1%	1049	8049	1,000	±1%
1020	8020	390	±2%	1050	8050	1,000	±2%
1021	8021	390	±5%	1051	8051	1,000	±5%
1022	8022	430	±1%	1052	8052	1,100	±1%
1023	8023	430	±2%	1053	8053	1,100	±2%
1024	8024	430	±5%	1054	8054	1,100	±5%
1025	8025	470	±1%	1055	8055	1,200	±1%
1026	8026	470	±2%	1056	8056	1,200	±2%
1027	8027	470	±5%	1057	8057	1,200	±5%
1028	8028	510	±1%				
1029	8029	510	±2%				
1030	8030	510	±5%				

1/ Dash numbers are non-established reliability.

TABLE II. Substitutability data. 1/

Superseding dash number M23269/02-	Superseded type designation in MIL-C-23269/2B	Superseded dash number in MIL-PRF 23269/2C through /2H M23269/01- (FRL in percent/1,000 hours)					
		500 V_{dc}					100 V_{dc}
		L (2.0)	M (1.0)	P (0.1)	R (0.01)	S (0.001)	S (0.001) 2/
1001	CYR15C221F	2001	3001	4001	5001	6001	- - -
1002	CYR15C221G	2002	3002	4002	5002	6002	- - -
1003	CYR15C221J	2003	3003	4003	5003	6003	- - -
1004	CYR15C241F	2004	3004	4004	5004	6004	- - -
1005	CYR15C241G	2005	3005	4005	5005	6005	- - -
1006	CYR15C241J	2006	3006	4006	5006	6006	- - -
1007	CYR15C271F	2007	3007	4007	5007	6007	- - -
1008	CYR15C271G	2008	3008	4008	5008	6008	- - -
1009	CYR15C271J	2009	3009	4009	5009	6009	- - -
1010	CYR15C301F	2010	3010	4010	5010	6010	- - -
1011	CYR15C301G	2011	3011	4011	5011	6011	- - -
1012	CYR15C301J	2012	3012	4012	5012	6012	- - -
1013	CYR15C331F	2013	3013	4013	5013	6013	- - -
1014	CYR15C331G	2014	3014	4014	5014	6014	- - -
1015	CYR15C331J	2015	3015	4015	5015	6015	- - -
1016	CYR15C361F	2016	3016	4016	5016	6016	- - -
1017	CYR15C361G	2017	3017	4017	5017	6017	- - -
1018	CYR15C361J	2018	3018	4018	5018	6018	- - -
1019	CYR15C391F	2019	3019	4019	5019	6019	- - -
1020	CYR15C391G	2020	3020	4020	5020	6020	- - -
1021	CYR15C391J	2021	3021	4021	5021	6021	- - -
1022	CYR15C431F	2022	3022	4022	5022	6022	- - -
1023	CYR15C431G	2023	3023	4023	5023	6023	- - -
1024	CYR15C431J	2024	3024	4024	5024	6024	- - -
1025	CYR15C471F	2025	3025	4025	5025	6025	- - -
1026	CYR15C471G	2026	3026	4026	5026	6026	- - -
1027	CYR15C471J	2027	3027	4027	5027	6027	- - -
1028	CYR15C511F	2028	3028	4028	5028	6028	- - -
1029	CYR15C511G	2029	3029	4029	5029	6029	- - -
1030	CYR15C511J	2030	3030	4030	5030	6030	- - -
		300 V_{dc}					100 V_{dc}
1031	CYR15C561F	2031	3031	4031	5031	6031	- - -
1032	CYR15C561G	2032	3032	4032	5032	6032	- - -
1033	CYR15C561J	2033	3033	4033	5033	6033	- - -
1034	CYR15C621F	2034	3034	4034	5034	6034	- - -
1035	CYR15C621G	2035	3035	4035	5035	6035	- - -
1036	CYR15C621J	2036	3036	4036	5036	6036	- - -
1037	CYR15C681F	2037	3037	4037	5037	6037	- - -
1038	CYR15C681G	2038	3038	4038	5038	6038	- - -
1039	CYR15C681J	2039	3039	4039	5039	6039	- - -
1040	CYR15C751F	2040	3040	4040	5040	6040	- - -
1041	CYR15C751G	2041	3041	4041	5041	6041	- - -
1042	CYR15C751J	2042	3042	4042	5042	6042	- - -
1043	CYR15C821F	2043	3043	4043	5043	6043	- - -
1044	CYR15C821G	2044	3044	4044	5044	6044	- - -
1045	CYR15C821J	2045	3045	4045	5045	6045	- - -

See footnotes at end of table.

TABLE II. Substitutability data - Continued. 1/

Superseding dash number M23269/02-	Superseded type designation in MIL-C-23269/2B	Superseded dash number in MIL-PRF 23269/2C through /2H M23269/01- (FRL in percent/1,000 hours)					
		300 V_{dc}					100 V_{dc}
		L (2.0)	M (1.0)	P (0.1)	R (0.01)	S (0.001)	S (0.001) 2/
1046	CYR15C911F	2046	3046	4046	5046	6046	- - -
1047	CYR15C911G	2047	3047	4047	5047	6047	- - -
1048	CYR15C911J	2048	3048	4048	5048	6048	- - -
1049	CYR15C102F	2049	3049	4049	5049	6049	- - -
1050	CYR15C102G	2050	3050	4050	5050	6050	- - -
1051	CYR15C102J	2051	3051	4051	5051	6051	- - -
1052	CYR15C112F	2052	3052	4052	5052	6052	- - -
1053	CYR15C112G	2053	3053	4053	5053	6053	- - -
1054	CYR15C112J	2054	3054	4054	5054	6054	- - -
1055	CYR15C122F	2055	3055	4055	5055	6055	- - -
1056	CYR15C122G	2056	3056	4056	5056	6056	- - -
1057	CYR15C122J	2057	3057	4057	5057	6057	- - -
8001	- - -	- - -	- - -	- - -	- - -	- - -	7001
8002	- - -	- - -	- - -	- - -	- - -	- - -	7002
8003	- - -	- - -	- - -	- - -	- - -	- - -	7003
8004	- - -	- - -	- - -	- - -	- - -	- - -	7004
8005	- - -	- - -	- - -	- - -	- - -	- - -	7005
8006	- - -	- - -	- - -	- - -	- - -	- - -	7006
8007	- - -	- - -	- - -	- - -	- - -	- - -	7007
8008	- - -	- - -	- - -	- - -	- - -	- - -	7008
8009	- - -	- - -	- - -	- - -	- - -	- - -	7009
8010	- - -	- - -	- - -	- - -	- - -	- - -	7010
8011	- - -	- - -	- - -	- - -	- - -	- - -	7011
8012	- - -	- - -	- - -	- - -	- - -	- - -	7012
8013	- - -	- - -	- - -	- - -	- - -	- - -	7013
8014	- - -	- - -	- - -	- - -	- - -	- - -	7014
8015	- - -	- - -	- - -	- - -	- - -	- - -	7015
8016	- - -	- - -	- - -	- - -	- - -	- - -	7016
8017	- - -	- - -	- - -	- - -	- - -	- - -	7017
8018	- - -	- - -	- - -	- - -	- - -	- - -	7018
8019	- - -	- - -	- - -	- - -	- - -	- - -	7019
8020	- - -	- - -	- - -	- - -	- - -	- - -	7020
8021	- - -	- - -	- - -	- - -	- - -	- - -	7021
8022	- - -	- - -	- - -	- - -	- - -	- - -	7022
8023	- - -	- - -	- - -	- - -	- - -	- - -	7023
8024	- - -	- - -	- - -	- - -	- - -	- - -	7024
8025	- - -	- - -	- - -	- - -	- - -	- - -	7025
8026	- - -	- - -	- - -	- - -	- - -	- - -	7026
8027	- - -	- - -	- - -	- - -	- - -	- - -	7027
8028	- - -	- - -	- - -	- - -	- - -	- - -	7028
8029	- - -	- - -	- - -	- - -	- - -	- - -	7029
8030	- - -	- - -	- - -	- - -	- - -	- - -	7030
8031	- - -	- - -	- - -	- - -	- - -	- - -	7031
8032	- - -	- - -	- - -	- - -	- - -	- - -	7032
8033	- - -	- - -	- - -	- - -	- - -	- - -	7033
8034	- - -	- - -	- - -	- - -	- - -	- - -	7034
8035	- - -	- - -	- - -	- - -	- - -	- - -	7035
8036	- - -	- - -	- - -	- - -	- - -	- - -	7036
8037	- - -	- - -	- - -	- - -	- - -	- - -	7037

See footnotes at end of table.

TABLE II. Substitutability data - Continued. 1/

Superseding dash number M23269/02-	Superseded type designation in MIL-C-23269/2B	Superseded dash number in MIL-PRF 23269/2C through /2H M23269/01- (FRL in percent/1,000 hours)					
		300 V_{dc}					100 V_{dc}
		L (2.0)	M (1.0)	P (0.1)	R (0.01)	S (0.001)	S (0.001) 2/
8038	- - -	- - -	- - -	- - -	- - -	- - -	7038
8039	- - -	- - -	- - -	- - -	- - -	- - -	7039
8040	- - -	- - -	- - -	- - -	- - -	- - -	7040
8041	- - -	- - -	- - -	- - -	- - -	- - -	7041
8042	- - -	- - -	- - -	- - -	- - -	- - -	7042
8043	- - -	- - -	- - -	- - -	- - -	- - -	7043
8044	- - -	- - -	- - -	- - -	- - -	- - -	7044
8045	- - -	- - -	- - -	- - -	- - -	- - -	7045
8046	- - -	- - -	- - -	- - -	- - -	- - -	7046
8047	- - -	- - -	- - -	- - -	- - -	- - -	7047
8048	- - -	- - -	- - -	- - -	- - -	- - -	7048
8049	- - -	- - -	- - -	- - -	- - -	- - -	7049
8050	- - -	- - -	- - -	- - -	- - -	- - -	7050
8051	- - -	- - -	- - -	- - -	- - -	- - -	7051
8052	- - -	- - -	- - -	- - -	- - -	- - -	7052
8053	- - -	- - -	- - -	- - -	- - -	- - -	7053
8054	- - -	- - -	- - -	- - -	- - -	- - -	7054
8055	- - -	- - -	- - -	- - -	- - -	- - -	7055
8056	- - -	- - -	- - -	- - -	- - -	- - -	7056
8057	- - -	- - -	- - -	- - -	- - -	- - -	7057

1/ Superseding dash numbers are non-ER. Users are cautioned to evaluate this document for their particular application before citing the superseding dash numbers since the L, M, P, R, S failure rate levels (FRL) established in accordance with MIL-STD-690 are no longer available.

2/ Sixth power rule applies for derating at $0.5\frac{operating}{rated}$ voltage ratios and below.

Referenced documents: In addition to MIL-PRF-23269, this specification references MIL-STD-690.

Changes from previous issue. The margins of this specification are marked with vertical lines to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous issue.

Custodians:
Army - CR
Navy - EC
Air Force - 85
DLA - CC

Preparing activity:
DLA - CC

(Project 5910-2022-028)

Review activities:
Navy - AS, MC, OS, SH
Air Force -19
Other DoD - MDA

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at https://assist.dla.mil/.