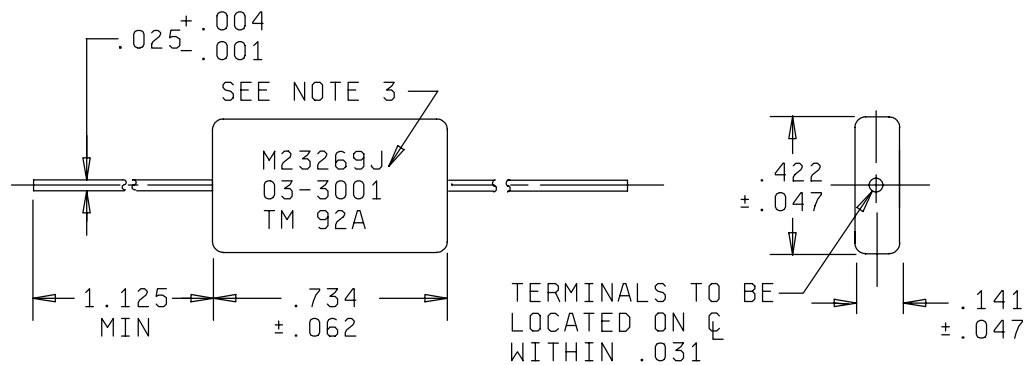


PERFORMANCE SPECIFICATION SHEET

CAPACITORS, FIXED, GLASS DIELECTRIC, (AXIAL WIRE-LEAD TERMINALS), ESTABLISHED RELIABILITY, STYLE CYR20

This specification 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 and MIL-PRF-23269.



Inches	mm	Inches	mm
.001	0.03	.062	1.57
.004	0.10	.141	3.58
.025	0.64	.422	10.72
.031	0.79	.734	18.64
.047	1.19	1.125	28.58

NOTES:

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

FIGURE 1. Dimensions and configurations.

REQUIREMENTS:

Design and construction:

Dimensions and configuration: See figure 1.

Case material: Glass.

Terminals: Solderable.

Capacitance (nominal): See table I.

Capacitance tolerance: See table I.

Rated voltage: See table I.

Failure rate level: M, P, R, or S.

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.

Insulation resistance: 10,000 megohms or 200-ohm-farads minimum (qualification 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 2,000 hours): 0.5 percent maximum.

DF (240 hours and 2,000 hours): 0.15 percent maximum.

Marking:	"M" Part or Identifying Number (PIN)	"J" Brand in lieu of slash
	M23269	J _____
	03-3001	
	TM 92	A _____
Trademark _____	Year code	Sequential 4 week lot code

Substitutability data: See table II.

MIL-PRF-23269/3G

TABLE I. Electrical and physical characteristics and dash numbers.

Capacitance (pF)	Capacitance tolerance	Dash number M23269/03- FRL in percent/1,000 hours				
		500 V dc				100 V dc
		M (1.0)	P (0.1)	R (0.01)	S (0.001)	S (0.001) $\underline{1/}$
560	±1%	3001	4001	5001	6001	7001
560	±2%	3002	4002	5002	6002	7002
560	±5%	3003	4003	5003	6003	7003
620	±1%	3004	4004	5004	6004	7004
620	±2%	3005	4005	5005	6005	7005
620	±5%	3006	4006	5006	6006	7006
680	±1%	3007	4007	5007	6007	7007
680	±2%	3008	4008	5008	6008	7008
680	±5%	3009	4009	5009	6009	7009
750	±1%	3010	4010	5010	6010	7010
750	±2%	3011	4011	5011	6011	7011
750	±5%	3012	4012	5012	6012	7012
820	±1%	3013	4013	5013	6013	7013
820	±2%	3014	4014	5014	6014	7014
820	±5%	3015	4015	5015	6015	7015
910	±1%	3016	4016	5016	6016	7016
910	±2%	3017	4017	5017	6017	7017
910	±5%	3018	4018	5018	6018	7018
1,000	±1%	3019	4019	5019	6019	7019
1,000	±2%	3020	4020	5020	6020	7020
1,000	±5%	3021	4021	5021	6021	7021
1,100	±1%	3022	4022	5022	6022	7022
1,100	±2%	3023	4023	5023	6023	7023
1,100	±5%	3024	4024	5024	6024	7024
1,200	±1%	3025	4025	5025	6025	7025
1,200	±2%	3026	4026	5026	6026	7026
1,200	±5%	3027	4027	5027	6027	7027
1,300	±1%	3028	4028	5028	6028	7028
1,300	±2%	3029	4029	5029	6029	7029
1,300	±5%	3030	4030	5030	6030	7030
1,500	±1%	3031	4031	5031	6031	7031
1,500	±2%	3032	4032	5032	6032	7032
1,500	±5%	3033	4033	5033	6033	7033
1,600	±1%	3034	4034	5034	6034	7034
1,600	±2%	3035	4035	5035	6035	7035
1,600	±5%	3036	4036	5036	6036	7036
1,800	±1%	3037	4037	5037	6037	7037
1,800	±2%	3038	4038	5038	6038	7038
1,800	±5%	3039	4039	5039	6039	7039

See footnote at end of table.

TABLE I. Electrical and physical characteristics and dash numbers - Continued.

Capacitance (pF)	Capacitance tolerance	Dash number M23269/03- FRL in percent/1,000 hours				
		500 V dc				100 V dc
		M (1.0)	P (0.1)	R (0.01)	S (0.001)	S (0.001) ^{1/}
2,000	±1%	3040	4040	5040	6040	7040
2,000	±2%	3041	4041	5041	6041	7041
2,000	±5%	3042	4042	5042	6042	7042
2,200	±1%	3043	4043	5043	6043	7043
2,200	±2%	3044	4044	5044	6044	7044
2,200	±5%	3045	4045	5045	6045	7045
2,400	±1%	3046	4046	5046	6046	7046
2,400	±2%	3047	4047	5047	6047	7047
2,400	±5%	3048	4048	5048	6048	7048
2,700	±1%	3049	4049	5049	6049	7049
2,700	±2%	3050	4050	5050	6050	7050
2,700	±5%	3051	4051	5051	6051	7051
3,000	±1%	3052	4052	5052	6052	7052
3,000	±2%	3053	4053	5053	6053	7053
3,000	±5%	3054	4054	5054	6054	7054
3,300	±1%	3055	4055	5055	6055	7055
3,300	±2%	3056	4056	5056	6056	7056
3,300	±5%	3057	4057	5057	6057	7057
		300 V dc				100 V dc
3,600	±1%	3058	4058	5058	6058	7058
3,600	±2%	3059	4059	5059	6059	7059
3,600	±5%	3060	4060	5060	6060	7060
3,900	±1%	3061	4061	5061	6061	7061
3,900	±2%	3062	4062	5062	6062	7062
3,900	±5%	3063	4063	5063	6063	7063
4,300	±1%	3064	4064	5064	6064	7064
4,300	±2%	3065	4065	5065	6065	7065
4,300	±5%	3066	4066	5066	6066	7066
4,700	±1%	3067	4067	5067	6067	7067
4,700	±2%	3068	4068	5068	6068	7068
4,700	±5%	3069	4069	5069	6069	7069
5,100	±1%	3070	4070	5070	6070	7070
5,100	±2%	3071	4071	5071	6071	7071
5,100	±5%	3072	4072	5072	6072	7072

^{1/} Sixth power rule applies for derating at 0.5 $\frac{\text{operating}}{\text{rated}}$ voltage ratios and below.

MIL-PRF-23269/3G

TABLE II. Substitutability data.

Superseded type designation in MIL-C-23269/3B	Use dash number M23269/03- in M23269/3C through /3F		Superseded type designation in MIL-C-23269/3B	Use dash number M23269/03- in M23269/3C through /3F	
	FRL in percent/1,000 hours			FRL in percent/1,000 hours	
	L (2.0)	M (1.0)		L (2.0)	M (1.0)
CYR20C561F	2001	3001	CYR20C182F	2037	3037
CYR20C561G	2002	3002	CYR20C182G	2038	3038
CYR20C561J	2003	3003	CYR20C182J	2039	3039
CYR20C621F	2004	3004	CYR20C202F	2040	3040
CYR20C621G	2005	3005	CYR20C202G	2041	3041
CYR20C621J	2006	3006	CYR20C202J	2042	3042
CYR20C681F	2007	3007	CYR20C222F	2043	3043
CYR20C681G	2008	3008	CYR20C222G	2044	3044
CYR20C681J	2009	3009	CYR20C222J	2045	3045
CYR20C751F	2010	3010	CYR20C242F	2046	3046
CYR20C751G	2011	3011	CYR20C242G	2047	3047
CYR20C751J	2012	3012	CYR20C242J	2048	3048
CYR20C821F	2013	3013	CYR20C272F	2049	3049
CYR20C821G	2014	3014	CYR20C272G	2050	3050
CYR20C821J	2015	3015	CYR20C272J	2051	3051
CYR20C911F	2016	3016	CYR20C302F	2052	3052
CYR20C911G	2017	3017	CYR20C302G	2053	3053
CYR20C911J	2018	3018	CYR20C302J	2054	3054
CYR20C102F	2019	3019	CYR20C332F	2055	3055
CYR20C102G	2020	3020	CYR20C332G	2056	3056
CYR20C102J	2021	3021	CYR20C332J	2057	3057
CYR20C112F	2022	3022	CYR20C362F	2058	3058
CYR20C112G	2023	3023	CYR20C362G	2059	3059
CYR20C112J	2024	3024	CYR20C362J	2060	3060
CYR20C122F	2025	3025	CYR20C392F	2061	3061
CYR20C122G	2026	3026	CYR20C392G	2062	3062
CYR20C122J	2027	3027	CYR20C392J	2063	3063
CYR20C132F	2028	3028	CYR20C432F	2064	3064
CYR20C132G	2029	3029	CYR20C432G	2065	3065
CYR20C132J	2030	3030	CYR20C432J	2066	3066
CYR20C152F	2031	3031	CYR20C472F	2067	3067
CYR20C152G	2032	3032	CYR20C472G	2068	3068
CYR20C152J	2033	3033	CYR20C472J	2069	3069
CYR20C162F	2034	3034	CYR20C512F	2070	3070
CYR20C162G	2035	3035	CYR20C512G	2071	3071
CYR20C162J	2036	3036	CYR20C512J	2072	3072

Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

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

Preparing activity:
DLA - CC

(Project 5910-2024-03)

Review activities:
Navy - AS, CG, MC, OS, SH
Air Force - 17, 19