

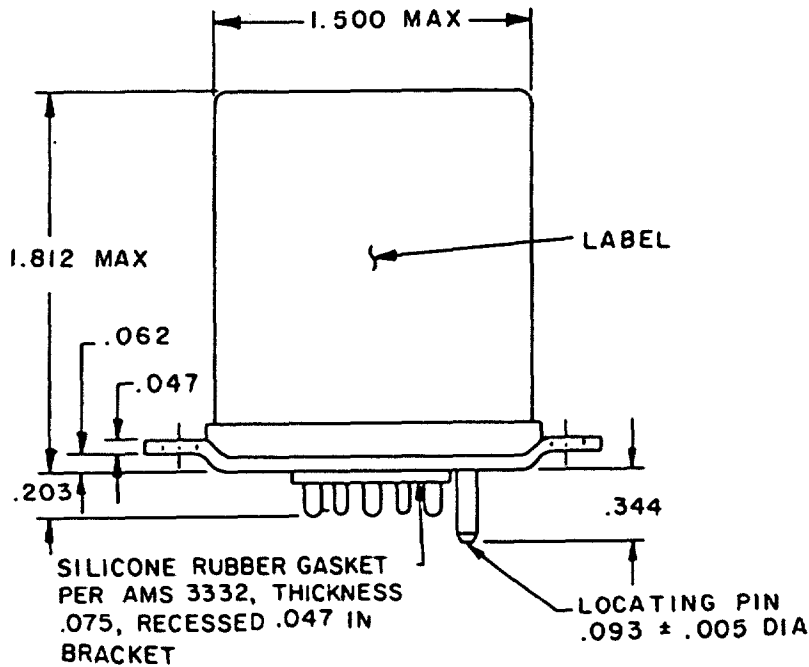
FED. SUP CLASS  
5945

INACTIVE FOR NEW DESIGN AFTER 5 JUN 87  
NO SUPERSEDING STANDARD  
(FOR NEW DESIGN USE MS27401)

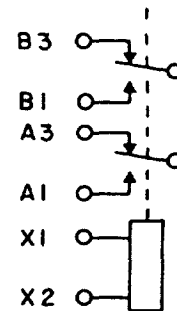
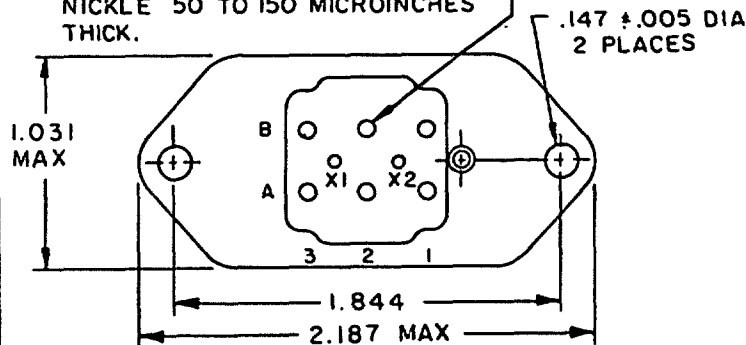
User activities:  
Army -  
Navy -  
Air Force -

Review activities:  
Army - EC  
Navy -  
Air Force - 11, 99

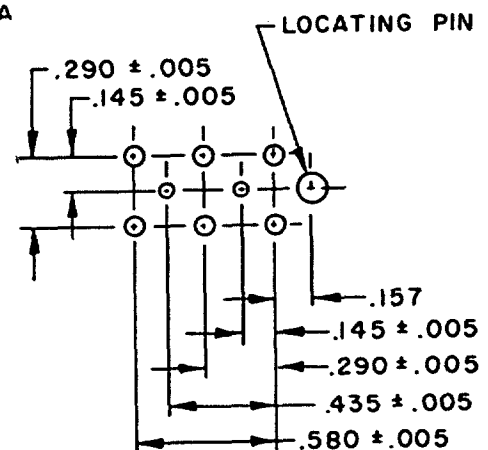
This military standard is approved for use by all Departments and Agencies of the Department of Defense. Selection for all new engineering and design applications and for repetitive use shall be made from this document when applicable.



6 PINS, .0625 ± .0010 DIA  
2 PINS, .040 ± .001 DIA (X1, X2)  
GOLD PLATED, MIL-G-45204,  
TYPE II, CLASS I, UNDERPLATING,  
NICKLE 50 TO 150 MICROINCHES  
THICK.



CIRCUIT DIAGRAM  
(SEE NOTES 4 AND 5)



PIN LAYOUT

① ENTIRE STANDARD REVISED

P.A. USAF - 85 Other Cust Navy - AS	International Interest	TITLE RELAYS, ELECTROMAGNETIC, 10 AMPERES, 2 POT, TYPE I, SOCKET MOUNTED, HERMETICALLY SEALED	MILITARY STANDARD <b>MS25323</b>
Procurement Specification MIL-R-6106	SUPERSEDES:	PAGE 1 OF 5	

DD FORM 672  
1 MAY 73  
AMSC N/A

(Coordinated) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

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5945-0745-11

APPROVED 12 May 58  
REVISED ① 5 JUN 87

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Inches	mm	Inches	mm	Inches	mm
.0010	0.025	.093	2.36	.435	11.05
.001	0.03	.145	3.68	.580	14.73
.005	0.13	.147	3.73	1.031	26.19
.040	1.02	.157	3.99	1.500	38.10
.047	1.19	.203	5.16	1.812	46.02
.062	1.57	.290	7.37	1.844	46.84
.0625	1.588	.344	8.74	2.187	55.55
.075	1.91				

## NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerances are  $\pm 0.010$  (0.25 mm).
4. Terminal numbers need not appear on relay headers provided there is affixed to the relay a suitable legible circuit diagram that permanently and positively identifies each terminal location specified herein.
5. The use of diodes on ac relays is optional. Actual application must be shown on label.
6. Pins to be perpendicular to header surface within one degree.
7. In the event of conflict between the text of this standard and the references cited herein, the text of this standard shall take precedence.
8. Referenced Government documents of the issue listed in that issue of the Department of Defense Index of Specifications and Standards (DODISS) specified in the solicitation form a part of this standard to the extent specified herein.

TABLE I. Dash numbers and characteristics.

Dash number	Type	Coil	Terminal type	Max weight in pounds
MS25323-				
02	1	dc	Plug in	0.28
A2	1	ac	Plug in	0.30
A3	1	ac	Plug in	0.30

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APPROVED 12 May 58 REVISED (J) ENTIRE STANDARD REVISED

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TABLE II. Operating characteristics.

MS part no.		Coil data										Time - (milliseconds maximum)								
		Coil	Nominal		Max		Max pick-up voltage			Drop-out voltage 2/ <u>      </u>	Hold voltage 2/ <u>      </u>	Operate 3/ <u>      </u>	Release 4/ <u>      </u>	Contact bounce						
			Volts 1/ <u>      </u>	Freq. Hz	Res Ω	Volts	Amperes	Normal 2/ <u>      </u>	High temp test					Cont current test	Main	Aux	NO	NC	NO	INC
D1		X1, X2	28	dc	N/A	29	0.20	18	19.8	22.5	1.5	7.0	20	20	2	2				
A1		X1, X2	115	400 5/ <u>      </u>	N/A	122	0.07	90	95	103	5.0	35	25	50	2	2				
A3		X1, X2	115	150/60	N/A	122	0.10	90	95	103	5.0	35	25	50	2	2				

CAUTION: Use of any coil voltage less than nominal coil voltage will compromise the operation of the relay.

1/ Over the temperature range.

2/ With nominal coil voltage.

3/ From nominal coil voltage.

4/ MS25323-A2 may be used on 60 Hz if maximum ambient temperature is limited to +85°C.

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TABLE III. Rated contact load (amperes per pole) (case grounded).

Type of load	Life operating cycles X 10 <sup>3</sup>	28 V dc		115 V ac, 1 phase		115/200 V ac, 3 phase 1/				See appropriate notes
		Main	Aux	Main	Aux	Main	Aux	Main	Aux	
		NO	NC	NO	NC	400 Hz	60 Hz	400 Hz	60 Hz	
Resistive	100	10	10	10	6			10	6	
Inductive	100									
Inductive	20	6	6	6	4			6	4	
Motor	100	4	4	4	3			4	3	
Lamp	100	2	2	2	1.5			2	1.5	
Transfer load										2/
Mechanical life reduced current	400	2.5	2.5	2.5	2			2.5	2	
Intnd current		Applicable per specification								

1/ Absence of value indicates relay is not rated for 3-phase applications.  
2/ Transfer load indicates relay suitable for transfer between unsynchronized ac power supplies at rating indicated.

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USAF - 85  
Other Cust  
Navy - AS

International  
interest

TITLE

RELAYS, ELECTROMAGNETIC, 10 AMPERES,  
2 PDT, TYPE I, SOCKET MOUNTED,  
HERMETICALLY SEALED

MILITARY STANDARD

MS 25323

Procurement Specification  
MIL-R-6106

SUPERSEDES:

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APPROVED 12 May 1958 REVISED J ENTIRE STANDARD REVISED.

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### Environmental characteristics

Temperature range -70°C to +125°C  
Max altitude rating 80,000 ft  
Shock G-level 50 G  
Duration 11 ms  
Max duration contact opening 10 μs  
Vibration - sinusoidal 10 G  
G-level 5 - 1500 Hz  
Frequency range 15 G  
Acceleration

### Electrical characteristics

Insulation resistance 100 megohms  
After life or environmental tests 50 megohms  
Dielectric strength (sea level)

	Initial	After life tests
Coil to case	1,000 V rms	1,000 V rms

Aux contacts	
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All other points	1,500 V rms	1,125 V rms
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Dielectric strength (Altitude)

Coil to case	80,000 ft
	500 V rms

Aux contacts	
--------------	--

All other points	500 V rms
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Max contact drop initial 0.150 volt  
After life test 0.175 volt  
Overload current 40 amperes dc,  
60 amperes ac  
Rupture current 50 amperes dc,  
80 amperes ac

Duty rating Continuous  
RFI specification MIL-STD-461  
(Applicable to coil circuits of ac operated relays)

### Quality conformance inspection

Performance of groups B and C tests are not applicable.

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