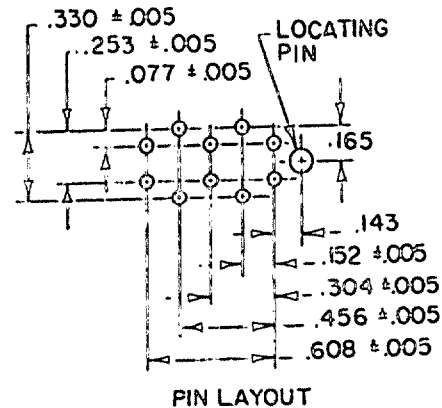
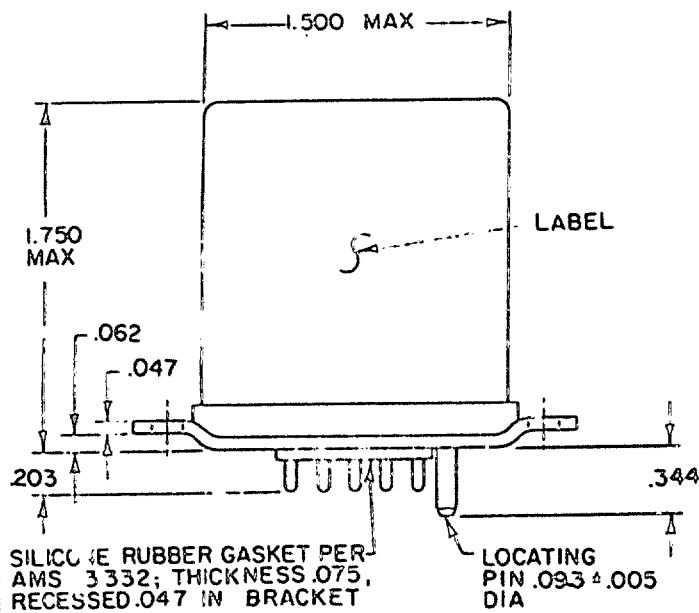


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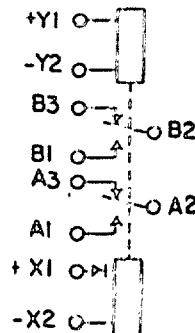
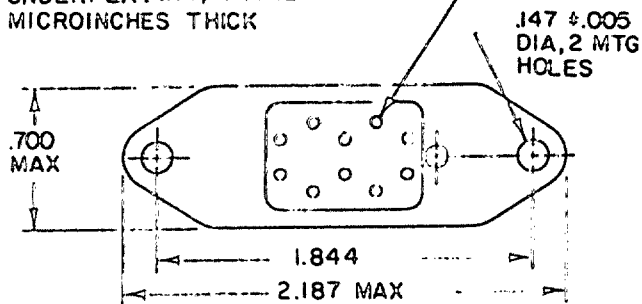
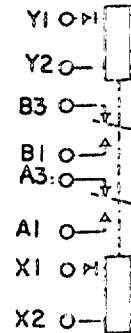
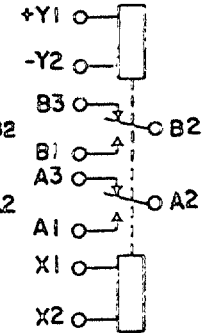
INACTIVE FOR NEW DESIGN AFTER 5 JUN 87
NO SUPERSEDING STANDARD
(FOR NEW DESIGN USE MIL-R-6106/38)

User activities: Army -
Navy -
Air Force -

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



10 PINS .040 ± .001 DIA, GOLD PLATED
MIL-G-45204, TYPE II, CLASS I,
UNDERPLATING, NICKLE 50 TO 150
MICROINCHES THICK

CIRCUIT DI
(NOTE 7)CIRCUIT AI
(NOTE 5)CIRCUIT ADI
(NOTES 5, 7)

(G) denotes changes

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

P A
AF - 85
Other Cust
Navy - AS

International
Interest

TITLE

RELAYS, ELECTROMAGNETIC, 5 AMPERES,
2 PDT, TYPE I, MAGNETIC LATCH,
SOCKET MOUNTED, HERMETICALLY SEALED

MILITARY STANDARD

MS25455

Procurement Specification
MIL-R-6106

SUPERSEDES:

PAGE 1 OF 5

FORM 672

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5945-0791-01

DISTRIBUTION STATEMENT A - Approved for public release; distribution is unlimited.

APPROVED 1 Nov 60 REVISED (G) 20 Jan 1989

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5945User activities: Army -
Navy -
Air Force -Review activities: Army -
Navy - EC
Air Force - 11

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.

Inches	mm	Inches	mm
.001	0.03	.165	4.19
.005	0.13	.203	5.16
.010	0.25	.253	6.43
.040	1.02	.304	7.72
.047	1.19	.330	8.38
.062	1.57	.344	8.74
.075	1.91	.456	11.58
.077	1.96	.608	15.44
.093	2.36	.700	17.78
.143	3.63	1.500	38.10
.147	3.73	1.750	44.45
.152	3.86	1.844	46.84
		2.187	55.55

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerances are $\pm .010$ (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 1 degree.
7. Relay is magnetically latched in both positions. Caution note to observe polarity must appear on relays with dc coils.
8. Shock, vibration, and acceleration requirements applicable with coils de-energized.
9. In the event of a conflict between the text of this standard and the references cited herein, the text of this standard shall take precedence.
10. 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
MS25455-				
D1	I	dc	Plug in	0.21
A1	I	ac	Plug in	0.23
AD1	I	ac-dc	Plug in	0.23

P.A. AF - 85 Other Cust Navy - AS	International Interest	TITLE RELAYS, ELECTROMAGNETIC, 5 AMPERES, 2 PDT, TYPE I, MAGNETIC LATCH, SOCKET MOUNTED, HERMETICALLY SEALED	MILITARY STANDARD MS 25455
Procurement Specification MIL-R-6106		SUPERSEDES:	PAGE 2 OF 5

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Review activities: Army -
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User activities: Army -
Navy -
Air Force -

TABLE II. Operating characteristics.

MS part no. MS25455-	Coil data										Time - (milliseconds maximum)				
	Coil	Nominal		Max		Max pick-up voltage			Operate 3/ 	Release 4/ 	Contact bounce				
		Volts 1/ 	Freq. Hz	Res Ω	Volts	Amperes	Normal 2/ 	High temp test			Cont current test	Main	Aux		
D1	X1, X2 Y1, Y2	28	dc	N/A	29	0.12	18	18	19.8	25	N/A	2	2		
A1	X1, X2 Y1, Y2	115	400 5/ 	N/A	122	0.06	90	90	95	25	N/A	2	2		
A01	X1, X2 Y1, Y2	115	400 5/ 	N/A	122	0.06	90	90	95	25	N/A	2	2		
	X1, X2 Y1, Y2	28	dc	N/A	29	0.12	18	18	19.8	25	N/A	2	2		

- 1/ CAUTION: Use of any coil voltage less than nominal coil voltage will compromise the operation of the relay.
- 2/ Over the temperature range.
- 3/ With nominal coil voltage.
- 4/ From nominal coil voltage.
- 5/ HS25455-A1 and -AD1 ac coils may be used on 60 Hz if maximum ambient temperature is limited to +85°C (coil current: 0.066 ampere maximum).

P.A. AF - 85 Other Cust Navy - AS	International Interest	TITLE RELAYS, ELECTROMAGNETIC, 5 AMPERES, 2 PDT, TYPE 1, MAGNETIC LATCH, SOCKET MOUNTED, HERMETICALLY SEALED	MILITARY STANDARD
			MS 25455
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Review activities: Army - Navy - EC
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User activities: Army - Navy - Air Force -

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

Type of load	Life operating cycles X 10 ³	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	400 Hz	60 Hz	
Resistive	100	5	5		5	4						
Inductive	100											
Inductive	20	3	3		3	2						
Motor	100	1.5	1.5		1.5	1						
Lamp	100	0.8	0.8		0.8	0.6						
Transfer load												2/
Mechanical life reduced current	400	1.25	1.25		1.25	1						
Intmd 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.

P.A. AF - 85 Other Cust Navy - AS	International Interest	TITLE RELAYS, ELECTROMAGNETIC, 5 AMPERES, 2 PDT, TYPE I, MAGNETIC LATCH, SOCKET MOUNTED, HERMETICALLY SEALED	MILITARY STANDARD MS25455
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Review activities: Army - Navy - EC Air Force - 11

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FED. SUP CLASS
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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 10 G
Frequency range 5 - 1500 Hz
Acceleration 15 G

Electrical characteristics

Insulation resistance, initial 100 megohms
After life or environmental tests 50 megohms
Dielectric strength (sea level)
Initial 1,000 V rms After life tests 1,000 V rms
Coil to case 1,000 V rms
Aux contacts 1,000 V rms
All other points 1,000 V rms
Dielectric strength (altitude)
(When mounted in mating socket) 80,000 ft
Coil to case 500 V rms
Aux contacts 500 V rms
All other points 500 V rms
Max contact drop initial 0.150 volt
After life test 0.175 volt
Overload current 20 amperes
Rupture current 25 amperes
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 inspections are not applicable.

Group A acceptance reports shall be submitted to the preparing activity on a yearly basis in order to retain qualification for this military standard sheet.

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P.A. AF - 85 Other Cust Navy - AS	International Interest	TITLE RELAYS, ELECTROMAGNETIC, 5 AMPERES, 2 PDT, TYPE I, MAGNETIC LATCH, SOCKET MOUNTED, HERMETICALLY SEALED	MILITARY STANDARD MS25455
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