MIL-DTL-38999 SERIES I
ORDERING INFORMATION

MS 27466 T 17 F 26 P A

MILITARY PREFIX
MS Military Standard.

SHELL STYLE
See Table I below.

CLASS
E Environmental, may or may not have teeth on rear of shell. Current for MS27496, MS27505, and MS27662. Inactive for new design for all others. Use Class T.
P Potting, includes potting boot and short rear grommet. Inactive for new Air Force design.
T Environmental, with teeth on rear of shell, less rear hardware.
Y Hermetic.

SHELL SIZE
9, 11, 13, 15, 17, 19, 21, 23, 25.

MATERIAL AND FINISH
See Table II below.

INSERT CONFIGURATION
See Section 16F for illustrations and codes.

CONTACT STYLE
A Connector less pin contacts.
B Connector less socket contacts.
C Feed-thru contacts. Used on MS27662 only.
H Pin contacts, 1500 cycle.
J Socket contacts, 1500 cycle.
P Pin contacts, 500 cycle (crimp and hermetics with solder cups).
S Socket contacts, 500 cycle (crimp and hermetics with solder cups).
X Pin with eyelet (hermetics only).
Z Socket with eyelet (hermetics only).

ALTERNATE POSITION (POLARIZATION)
BLANK (normal), **A, B, C, D.**
See page 16F-4.

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TABLE I. SHELL STYLE

PREFIX & SHELL STYLE	DESCRIPTION	AVAILABLE IN CLASS	SEE PAGE
MS27466	Wall mount receptacle	E*, P, T	16B-6
MS27467	Straight plug, EMI grounding	E*, P, T	16B-7
MS27468	Jam nut receptacle	E*, P, T	16B-8
MS27469	Hermetic wall mount receptacle	Y	16B-9
MS27470	Hermetic jam nut receptacle	Y	16B-9
MS27471	Hermetic solder mount receptacle	Y	16B-10
MS27496	Box mount receptacle	E	16B-10
MS27498	Superseded by MS27467 with M85049/47 backshell	E	16B-11
MS27505	Box mount receptacle, rear panel mounting	E	16B-11
MS27515	Superseded by MS27656	E*, T	16B-12
MS27652	Superseded by MS27466	E*, T	16B-6
MS27653	Superseded by MS27467	E*, T	16B-7
MS27654	Superseded by MS27656	E*, T	16B-12
MS27656	Wall mount receptacle, rear panel mounting	E*, P, T	16B-12, 16B-13
MS27661	Straight plug, lanyard release	E*, T	16B-13
MS27662	Thru-bulkhead receptacle	E	16B-14

* Inactive for new design. Use Class T.

TABLE II. MATERIAL AND FINISH

CODE	MATERIAL	FINISH	TEMP RANGE
A	Aluminum	Bright or gold cadmium over nickel	-65°C to +150°C
B	Aluminum	Olive drab cadmium over nickel	-65°C to +175°C
C	Aluminum	Non-conductive anodize	-65°C to +200°C
D	Steel	Fused tin, class Y only	-65°C to +150°C
E	Stainless Steel	Passivated, class Y only	-65°C to +200°C
F	Aluminum	Electroless nickel	-65°C to +200°C
N	Stainless Steel	Electrodeposited nickel	-65°C to +200°C
P	Aluminum	Pure Electrodeposited Aluminum	-65°C to +175°C
R(1)	Aluminum	Electrolesss nickel	-65°C to +175°C
T	Aluminum	Nickel fluorocarbon polymer	-65°C to +175°C
U	Aluminum	Bright or gold cadmium over nickel	-65°C to +175°C
X	Aluminum	Cadmium olive drab 500 hr salt spray	-65°C to +175°C
Y	Stainless Steel	Electrolesss nickel	-65°C to +200°C
Z	Aluminum	Zinc nickel	-65°C to +175°C

removed footnote

(1) Class R same as F, but higher corrosion requirement

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MIL-DTL-38999 SERIES II
ORDERING INFORMATION

MS 27472 T 18 B 35 P A

MILITARY PREFIX
MS Military Standard.

SHELL STYLE
See Table I below.

CLASS
- **E** Environmental, with grommet nut. May or may not have teeth on rear of shell. Current for MS27499, MS27508 and MS27513. Inactive for new design for all others. Use Class T.
- **P** Potting, includes potting boot and short rear grommet. Inactive for new Air Force design.
- **T** Environmental, with teeth on rear of shell, less rear grommet nut.
- **Y** Hermetic.

SHELL SIZE
8, 10, 12, 14, 16, 18, 20, 22, 24.

MATERIAL AND FINISH
See Table II below.

INSERT CONFIGURATION
See Section 16F for illustrations and codes.

CONTACT STYLE
- **A** Connector less pin contacts.
- **B** Connector less socket contacts.
- **P** Pin contacts (crimp and hermetics with solder cups).
- **S** Socket contacts (crimp and hermetics with solder cups).
- **X** Pin with eyelet (hermetics only).
- **Z** Socket with eyelet (hermetics only).

ALTERNATE POSITION (POLARIZATION)
BLANK (normal), **A, B, C, D.**
See page 16F-4

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TABLE I. SHELL STYLE

PREFIX & SHELL STYLE	DESCRIPTION	AVAILABLE IN CLASS	SEE PAGE
MS27472	Wall mount receptacle	E*, P, T	16C-5, 16C-6
MS27473	Straight plug	E*, P, T	16C-6, 16C-7
MS27474	Jam nut receptacle	E*, P, T	16C-8, 16C-9
MS27475	Hermetic wall mount receptacle	Y	16C-9
MS27476	Hermetic box mount receptacle	Y	16C-10
MS27477	Hermetic jam nut receptacle	Y	16C-10
MS27478	Hermetic solder mount receptacle	Y	16C-11
MS27479	Superseded by MS27472	E*,T	16C-5, 16C-6
MS27480	Superseded by MS27473	E*,T	16C-6, 16C-7
MS27481	Superseded by MS27474	E*,T	16C-8, 16C-9
MS27482	Superseded by MS27475	Y	16C-9
MS27483	Superseded by MS27477	Y	16C-10
MS27484	Straight plug, EMI grounding	E*, P, T	16C-11, 16C-12
MS27497	Wall mount receptacle, back panel mounting	E*, P, T	16C-13, 16C-14
MS27499	Box mount receptacle	E	16C-14
MS27500	Superseded by MS27473 with MS85049/47 backshell	E	16C-15
MS27503	Superseded by MS27478	Y	16C-11
MS27504	Superseded by MS27499	E*	16C-14
MS27508	Box mount receptacle, back panel mounting	E	16C-15
MS27513	Box mount receptacle, long grommet	E	16C-16
MS27664	Superseded by MS27497	E*,T	16C-13, 16C-14

* Inactive for new design. Use Class T.

TABLE II. MATERIAL AND FINISH

CODE	MATERIAL	FINISH	TEMP RANGE
A	Aluminum	Bright or gold cadmium over nickel	-65°C to +150°C
B	Aluminum	Olive drab cadmium over nickel	-65°C to +175°C
C	Aluminum	Non-conductive anodize	-65°C to +200°C
D	Steel	Fused tin, class Y only	-65°C to +150°C
E	Stainless Steel	Passivated, class Y only	-65°C to +200°C
F	Aluminum	Electroless nickel	-65°C to +200°C
N	Stainless Steel	Electrodeposited nickel	-65°C to +200°C
P	Aluminum	Pure Electrodeposited Aluminum	-65°C to +175°C
R(1)	Aluminum	Electrolesss nickel	-65°C to +175°C
T	Aluminum	Nickel fluorocarbon polymer	-65°C to +175°C
U	Aluminum	Bright or gold cadmium over nickel	-65°C to +175°C
X	Aluminum	Cadmium olive drab 500 hr salt spray	-65°C to +175°C
Y	Stainless Steel	Electrolesss nickel	-65°C to +200°C
Z	Aluminum	Zinc nickel	-65°C to +175°C

removed footnote

(1) Class R same as F, but higher corrosion requirement

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SC 1466 T 17 F 26 P A

PREFIX

SHELL STYLE
See Table I below.

CLASS
- **E** Environmental.
- **F** Environmental with strain relief.
- **P** Potting, includes potting boot and short rear grommet.
- **T** Environmental, with teeth on rear of shell, less rear hardware.
- **Y** Hermetic.

SHELL SIZE
9, 11, 13, 15, 17, 19, 21, 23, 25.

MATERIAL AND FINISH
See Table II below.

INSERT CONFIGURATION
See page 12B-2 thru 12B-10 for illustrations and codes.

CONTACT STYLE
- **A** Connector less pin contacts.
- **B** Connector less socket contacts.
- **C** Feed-thru contacts. Used on MS27662 only.
- **H** Pin contacts, 1500 cycle.
- **J** Socket contacts, 1500 cycle.
- **P** Pin contacts, 500 cycle (crimp and hermetics with solder cups).
- **S** Socket contacts, 500 cycle (crimp and hermetics with solder cups).
- **X** Pin with eyelet (hermetics only).
- **Z** Socket with eyelet (hermetics only).

For contact part numbers see Table III on page 3B-3

ALTERNATE POSITION (POLARIZATION)
BLANK (normal), **A, B, C, D.** See page 12B-1.

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TABLE I. SHELL STYLE

PREFIX & SHELL STYLE	DESCRIPTION	AVAILABLE IN CLASS	SEE PAGE
SC1001	In-line receptacle	F,P,T	16H-42, -43
SC1466	Wall mount receptacle	F,P,T	16B-6
SC1467	Straight plug, EMI grounding	F,P,T	16B-7
SC1468	Jam nut receptacle	F,P,T	16B-8
SC1469	Hermetic wall mount receptacle	Y	16B-9
SC1470	Hermetic jam nut receptacle	Y	16B-9
SC1471	Hermetic solder mount receptacle	Y	16B-10
SC1496	Box mount receptacle	E	16B-10
SC1498	90° plug	E	16B-11
SC1505	Box mount receptacle, rear panel mounting	E	16B-11
SC1656	Wall mount receptacle, rear panel mounting	F,P,T	16B-12, -13
SC1662	Thru-bulkhead receptacle	E	16B-14

* Inactive for new design. Use Class T.

TABLE II. MATERIAL/FINISH

CODE	MATERIAL	FINISH	TEMP RANGE
A	Aluminum	Bright or gold cadmium over nickel	-65°C to +150°C
B	Aluminum	Olive drab cadmium over nickel	-65°C to +175°C
C	Aluminum	Non-conductive anodize, black	-65°C to +200°C
D	Steel	Fused tin, class Y only	-65°C to +150°C
E	Stainless Steel	Passivated, class Y only	-65°C to +200°C
F	Aluminum	Electroless nickel	-65°C to +200°C
N	Stainless Steel	Electrodeposited nickel	-65°C to +200°C
R[1]	Aluminum	Electroless nickel	-65°C to +175°C
S	Stainless Steel	Passivated	-65°C to +200°C
T	Aluminum	Nickel fluorocarbon polymer	-65°C to +175°C
U	Aluminum	Bright or gold cadmium over nickel	-65°C to +175°C
X	Aluminum	Cadmium olive drab 1000 hr. salt spray	-65°C to +175°C
Z	Aluminum	Zinc nickel, 500 hr.	-65°C to +175°C

appended line items to table

1 - Class R same as F, but higher corrosion requirement

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SPACECRAFT
SC2 SERIES MIL-DTL-38999 SERIES II

SC 2472 T 18 B 35 P A

SERIES PREFIX

SHELL STYLE
See Table I below.

CLASS
- **E** Environmental.
- **F** Environmental with strain relief.
- **P** Potting. Includes potting boot and short rear grommet.
- **T** Environmental, with teeth on rear of shell, less rear grommet nut.
- **Y** Hermetic.

SHELL SIZE
8, 10, 12, 14, 16, 18, 20, 22, 24.

MATERIAL AND FINISH
See Table II below.

INSERT CONFIGURATION
See pages 12B-2 thru 12B-10 for illustrations and codes.

CONTACT STYLE
- **A** Connector less pin contacts.
- **B** Connector less socket contacts.
- **P** Pin contacts (crimp and hermetics with solder cups).
- **S** Socket contacts (crimp and hermetics with solder cups).
- **X** Pin with eyelet (hermetics only).
- **Z** Socket with eyelet (hermetics only).

ALTERNATE POSITION (POLARIZATION)
BLANK (normal), **A, B, C, D.** See page 12B-1

BD-308

TABLE I. SHELL STYLE

PREFIX & SHELL STYLE	DESCRIPTION	AVAILABLE IN CLASS	SEE PAGE
SC2001	In-line receptacle	F, E, P, T	16H-43, -44
SC2472	Wall mount receptacle	F, E, P, T	16C-5, -6
SC2473	Straight plug	F, E, P, T	16C-6, -7
SC2474	Jam nut receptacle	F, E, P, T	16C-8, -9
SC2475	Hermetic wall mount receptacle	Y	16C-9
SC2476	Hermetic box mount receptacle	Y	16C-10
SC2477	Hermetic jam nut receptacle	Y	16C-10
SC2478	Hermetic solder mount receptacle	Y	16C-11
SC2484	Straight plug, EMI grounding	F, E, P, T	16C-11, -12
SC2497	Wall mount receptacle, back panel mounting	F, E, P, T	16C-13, -14
SC2499	Box mount receptacle	E	16C-14
SC2500	90° Plug	E	16C-15
SC2508	Box mount receptacle, back panel mounting	E	16C-15
SC2513	Box mount receptacle, long grommet	E	16C-16

TABLE II. MATERIAL/FINISH

CODE	MATERIAL	FINISH	TEMP RANGE
A	Aluminum	Bright or gold cadmium over nickel	-65°C to +150°C
B	Aluminum	Olive drab cadmium over nickel	-65°C to +175°C
C	Aluminum	Non-conductive anodize, black	-65°C to +200°C
D	Steel	Fused tin, class Y only	-65°C to +150°C
E	Stainless Steel	Passivated, class Y only	-65°C to +200°C
F	Aluminum	Electroless nickel	-65°C to +200°C
N	Stainless Steel	Electrodeposited nickel	-65°C to +200°C
R[1]	Aluminum	Electroless nickel	-65°C to +175°C
S	Stainless Steel	Passivated	-65°C to +200°C
T	Aluminum	Nickel fluorocarbon polymer	-65°C to +175°C
U	Aluminum	Bright or gold cadmium over nickel	-65°C to +175°C
X	Aluminum	Cadmium olive drab 1000 hr. salt spray	-65°C to +175°C
Z	Aluminum	Zinc nickel, black, 500 hr.	-65°C to +175°C

1 - Class R same as F, but higher corrosion requirement

appended line items to table

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SC39 20 F 9 - 35 P N

SERIES PREFIX

SHELL STYLE
See Table I below.

CLASS
See Table II below.

SHELL SIZE
9, 11, 13, 15, 17, 19, 21, 23, 25.

INSERT CONFIGURATION
See pages 12B-2 thru 12B-10 for illustrations and codes.

CONTACT STYLE
- **A** Connector less pin contacts.
- **B** Connector less socket contacts.
- **H** Pin contacts, 1500 cycle.
- **J** Socket contacts 1500 cycle.
- **P** Pin contacts 500 cycle (hermetics with solder cups).
- **S** Socket contact 500 cycle (hermetics with solder cups).
- **X** Pin with eyelet (hermetics only).
- **Z** Socket with eyelet (hermetics only).

ALTERNATE POSITION (POLARIZATION)
N (normal), **A, B, C, D, E.** See page 12B-1.

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TABLE I. SHELL STYLE

PREFIX & SHELL STYLE	DESCRIPTION	AVAILABLE IN CLASS	SEE PAGE
SC3901	In-line receptacle	F, G, J, K, M, S, W	16H-45
SC3920	Wall mount receptacle	F, G, J, K, M, S, W	16C-14
SC3921	Hermetic seal box mount receptacle	H, N, Y	16C-14
SC3923	Hermetic seal jam nut receptacle	H, N, Y	16C-15
SC3924	Jam nut receptacle	F, G, J, K, M, S, W	16C-15
SC3925	Hermetic seal solder mount receptacle	H, N, Y	16C-16
SC3926	Straight plug, self locking	F, G, J, K, M, S, W	16C-16
SC3927	Hermetic seal weld mount receptacle	H, N, Y	16C-17

TABLE II. CLASS

CLASS	CLASS†	DESCRIPTION	MATERIAL	FINISH	TEMPERATURE
C	SVC	Environmental	Aluminum	Non-conductive anodize, black	-65° to 200°C
F	SVF	Environmental	Aluminum	Electroless nickel	-65° to 200°C
G	SVG	Environmental, space grade	Aluminum	Electroless nickel	-65° to 200°C
H		Hermetic, space grade	Stainless Steel	Electroless nickel	-65° to 200°C
J		Environmental	Composite	Cadmium olive drab	-65° to 175°C
K	SVK	Environmental firewall	Stainless Steel	Passivated	-65° to 200°C
L	SVL	Environmental	Stainless Steel	Electrodeposited nickel	-65° to 200°C
M		Environmental	Composite	Electroless nickel	-65° to 200°C
N		Hermetic	Stainless Steel	Electrodeposited nickel	-65° to 200°C
P	SVP	Environmental	Aluminum	Pure electrodeposited aluminum	-65° to 175°C
R	SVR*	Environmental	Aluminum	Electrodeposited nickel	-65° to 200°C
S	SVS	Environmental	Stainless Steel	Electrodeposited nickel	-65° to 200°C
T	SVT	Environmental	Aluminum	Nickel fluorocarbon polymer	-65° to 175°C
W	SVW	Environmental	Aluminum	Cadmium olive drab 500 hr. salt spray	-65° to 175°C
X	SVX	Environmental	Aluminum	Cadmium olive drab 1000 hr. salt spray	-65° to 175°C
Y		Hermetic	Stainless Steel	Electroless nickel	-65° to 200°C
Z	SVZ	Environmental	Aluminum	Zinc nickel, black, 500 hr.	-65° to 175°C

* Class R same as F, but higher corrosion requirement
† Integrated Backshell.

appended line and column items to table