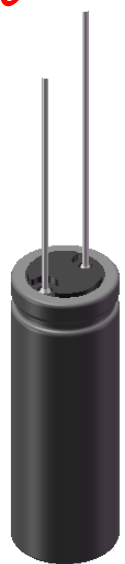
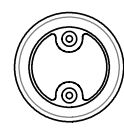
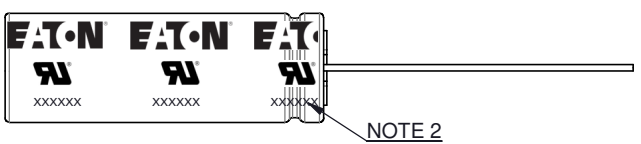
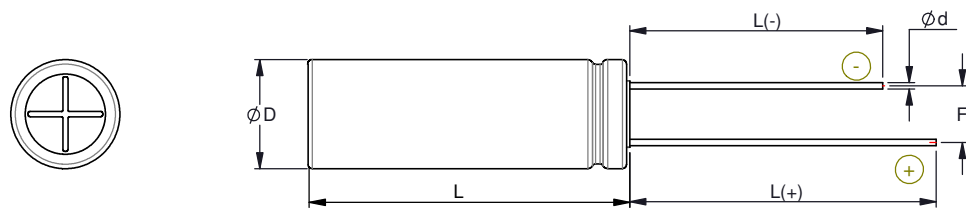
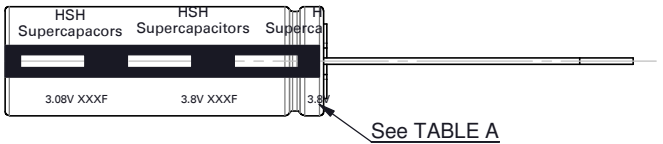


Table A									
Item	Eaton PN	Dimensions (mm)						Voltage/Cap	Weight(REF)
		ØD ±0.5	L	P ±0.5	Ød ±0.05	L (+) ±3.0	L (-) ±3.0	Marking	(g)
1	HSH0512-3R8305-R	5.0	12.0±2.0	2.0	0.5	27.0	22.0	3.8V 3F	0.5±0.1 g
2	HSH0612-3R8805-R	6.3	12.0±2.0	2.6	0.5	27.0	22.0	3.8V 8F	0.8±0.2 g
3	HSH0622-3R8226-R	6.3	22.0±2.0	2.6	0.5	27.0	22.0	3.8V 22F	1.3±0.3 g
4	HSH0814-3R8256-R	8.0	14.0±1.5	3.5	0.6	27.0	22.0	3.8V 25F	1.4±0.3 g
5	HSH0820-3R8406-R	8.0	20.0±2.0	3.5	0.6	27.0	22.0	3.8V 40F	2.0±0.3 g
6	HSH0825-3R8556-R	8.0	25.0±2.0	3.5	0.6	27.0	22.0	3.8V 55F	2.2±0.3 g
7	HSH1016-3R8556-R	10.0	16.0±2.0	5.0	0.6	27.0	22.0	3.8V 55F	2.5±0.5 g
8	HSH1020-3R8856-R	10.0	20.0±2.0	5.0	0.6	27.0	22.0	3.8V 85F	3.2±0.5 g
9	HSH1025-3R8117-R	10.0	25.0±2.0	5.0	0.6	27.0	22.0	3.8V 110F	3.8±0.5 g
10	HSH1030-3R8157-R	10.0	30.0±2.0	5.0	0.6	27.0	22.0	3.8V 150F	5.0±0.5 g
11	HSH1225-3R8207-R	12.5	25.0±2.0	5.0	0.6	27.0	22.0	3.8V 200F	6.0±0.6 g
12	HSH1235-3R8307-R	12.5	35.0±2.0	5.0	0.6	27.0	22.0	3.8V 300F	9.0±1 g
13	HSH1240-3R8357-R	12.5	40.0±2.0	5.0	0.6	27.0	22.0	3.8V 350F	9.8±1 g
14	HSH1840-3R8857-R	18.0	40.0±2.0	7.5	0.8	27.0	22.0	3.8V 850F	21±2 g

REV	ZONE	DESCRIPTION	DATE	ECN	BY
01		Preliminary.	04/03/2024	--	D.HUANG
02		Correct the typo in Table A.	06/17/2024	--	D.HUANG



- NOTES:
- "-" negative marking on the sleeve shall align with cathode lead wire.
 - Lot # is XXXXXX
--1st "X" is year (A=2020, B=2021, ...);
--2nd "X" is month (1= Jan, 2= Feb,... O=Oct, N=Nov, D=Dec);
--3rd "X" is supercapacitor type(2= Lic);
--Last "XXX" is batch number (001~999).
 - Capacitors are tested 100% for Capacitance, ESR test.
 - Lead material: Copper(>99.5% Cu) clad steel wire, 100% matte tin plating.
 - Environmental compliance:
(a) RoHS, (b) REACH, (c) PFOS & PFOA, (d) Halogen Free, Sb2O3 and Red Phosphorus.

External Customer Drawing

EATON, Electronics Division
DCC REFERENCE

Special Characteristics			
Type	Level	Symbol & No	Remark
Special (SC)	Critical	△ (0)	
	Significant	◇ (0)	

Powering Business Worldwide

HSHXXXX-3R8XXX-R

SIZE: **A3**

SCALE: 2:1

DWG NO: **9A5424**

SHEET 1 OF 2

REV: **02**

GENERAL DRAWING PRACTICES IN ACCORDANCE WITH ASME - Y14.100-2013 DIMENSIONS AND TOLERANCES IN ACCORDANCE WITH ASME - Y14.5-2009		APPROVALS		DATE
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS TOLERANCES TO BE		PRODUCT MANAGER		--/--/----
ONE PLACE X.X = ±0.3 mm		ENGINEER		--/--/----
TWO PLACE X.X X = ±0.13 mm		QUALITY		--/--/----
ALL ANGLES X.X = ±0.5°		MATERIAL		
THIRD ANGLE PROJECTION		PREP	N/A	

REV	ZONE	DESCRIPTION	DATE	ECN	BY
--		See Revision Info in Sheet #1.	--/--/--		

TABLE B Specification for Single Cap											
Item	Eaton PN	Rated Voltage	Min. Operating Voltage	Surge Voltage	Operating temperature range	Storage temperature Range	Capacitance (F)		Maximum initial ESR (mΩ)		Leakage current (μA) @72hrs, 25°C
							Nominal	Tolerance	1KHz, 25°C	DC, 25°C	
1	HSR0512-3R8305-R	3.8 V	2.2 V	4.2 V	-25~+70°C	-30~+70°C	3	-20%~+50%	4000	9000	≤1.8
2	HSR0612-3R8805-R	3.8 V	2.2 V	4.2 V	-25~+70°C	-30~+70°C	8	-20%~+50%	1200	2600	≤2.0
3	HSR0622-3R8226-R	3.8 V	2.2 V	4.2 V	-25~+70°C	-30~+70°C	22	±20%	450	1000	≤3.5
4	HSR0814-3R8256-R	3.8 V	2.2 V	4.2 V	-25~+70°C	-30~+70°C	25	±20%	400	900	≤2.5
5	HSR0820-3R8406-R	3.8 V	2.2 V	4.2 V	-25~+70°C	-30~+70°C	40	±20%	250	550	≤3.2
6	HSR0825-3R8556-R	3.8 V	2.2 V	4.2 V	-25~+70°C	-30~+70°C	55	±20%	200	450	≤5.0
7	HSR1016-3R8556-R	3.8 V	2.2 V	4.2 V	-25~+70°C	-30~+70°C	55	±20%	200	450	≤5.0
8	HSR1020-3R8856-R	3.8 V	2.2 V	4.2 V	-25~+70°C	-30~+70°C	85	±20%	120	250	≤8.0
9	HSR1025-3R8117-R	3.8 V	2.2 V	4.2 V	-25~+70°C	-30~+70°C	110	±20%	90	220	≤9.0
10	HSR1030-3R8157-R	3.8 V	2.2 V	4.2 V	-25~+70°C	-30~+70°C	150	±20%	70	140	≤15.0
11	HSR1225-3R8207-R	3.8 V	2.2 V	4.2 V	-25~+70°C	-30~+70°C	200	±20%	65	135	≤18.0
12	HSR1235-3R8307-R	3.8 V	2.2 V	4.2 V	-25~+70°C	-30~+70°C	300	±20%	50	100	≤30.0
13	HSR1240-3R8357-R	3.8 V	2.2 V	4.2 V	-25~+70°C	-30~+70°C	350	±20%	45	90	≤35.0
14	HSR1840-3R8857-R	3.8 V	2.2 V	4.2 V	-25~+70°C	-30~+70°C	850	±20%	35	70	≤70.0

TABLE C Performance		
Parameter	Capacitance Change (% of initial value)	ESR AC (% of initial value)
Life (1000 hrs @ +70°C/3.8 V DC)	≤30%	≤200%
High Temperature Storage: (1000hrs, uncharged, @70°C)	≤30%	≤200%
Charge/Discharge Cycles (250,000 cycles @+20°C)*	≤30%	≤200%
Humidity, 40°C, 90~95%RH, 240h	≤30%	≤200%
High Temperature, 70°C	≤10%	≤100%
Low Temperature, -25°C	≤50%	≤1000%
*Cycle: 3.8V to 2.5V operating, 5s rest @+20°C		

External Customer Drawing

EATON, Electronics Division
DCC REFERENCE

- NOTES:
- 2.1 TABLE B is the specification for the single capacitor.
 - 2.2 TABLE C is the performance for the single capacitor.

MODEL SOURCE DATA

MODEL VERSION

GENERAL DRAWING PRACTICES IN ACCORDANCE WITH ASME - Y14.100-2004
DIMENSIONS AND TOLERANCES IN ACCORDANCE WITH ASME - Y14.5M-1994

APPROVALS

DATE

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UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS TOLERANCES TO BE
ONE PLACE X.X = ±0.3 mm
TWO PLACE X.X X = ±0.13 mm
ALL ANGLES X.X = ±0.5°

SPECIAL CHARACTERISTIC $\diamond (0)$
SIGNIFICANT CHARACTERISTIC $\triangle (0)$

THIRD ANGLE PROJECTION

PRODUCT MANAGER

ENGINEER

DRAWN

CHECKED

DATE

DATE

DATE

DATE

DATE

DATE

SIZE

DWG NO.

REV

SCALE

1:1

SHEET

2 OF 2


Powering Business Worldwide

HSHXXXX-3R8XXX-R


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