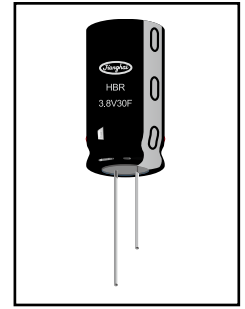


Features

- High temperature series
- Lower ESR
- RoHS compliant
- Consumer electronic
- Pulse power
- Hold-up power



Items	Characteristics		
Rated Voltage	3.8V~2.5V		
Operating Temperature Range	-15 ~+70°C/85°C (3.5V)		
Surge Voltage	4.2V		
Capacitance Range	10~220 F		
Capacitance Tolerance (20°C)	-20~+20%		
Temperature Characteristics	The specifications shall be met at category temperature range form -15°C to 7 °C	Capacitance Change	Within 50% of the value at 20°C
		ESRAC	Less than 1000% of the value at 20°C
High Temperature Loaded	The specifications shall be met after rated voltage applied at 70°C for 1000 hours	Capacitance Change	Within 30% of the initial value
		ESRAC	Less than 200% of initial value
High Temperature Storage	The specifications shall be met after storage at 70°C for 1000 hours	Capacitance Change	Within 30% of the initial value
		ESRAC	Less than 200% of initial value
Cycle Life	The specifications shall be met after 500,000 cycles at 25°C, cycle of charge/discharge from 3.8~2.5V	Capacitance Change	Within 30% of the initial value
		ESRAC	Less than 200% of initial value

Dimensions

mm

ΦD	8	10	12.5	16
p	3.5	5.0	5.0	7.5
Φd	0.6	0.6	0.6	0.8
a	1.5	2.0	2.0	2.0

Standard Ratings for HBR Series

U _R (Surge Voltage) Code	Rated Cap. 25°C	Impedance		Rated Current	Max. Current	Leakage Current	Size ΦD×L	P/N
		ESR _{dc}	ESR _{AC} 1KHz					
(V)	(F)	(mΩ)	(mΩ)	(A)	(A)	(μA)	(mm)	-
3.8 (4.2) 3R8	10	1500	500	0.05	0.5	2.0	8x14	SCCHBR3R8106MRH080014E
	25	650	300	0.125	0.8	2.5	8x20	SCCHBR3R8256MRH080020E
	30	700	250	0.15	0.9	3.0	8x25	SCCHBR3R8306MRH080025E
	30	550	250	0.15	1.0	3.0	10x16	SCCHBR3R8306MRH100016E
	50	450	200	0.25	1.8	4.5	10x20	SCCHBR3R8506MRH100020E
	70	250	100	0.35	3.0	5.0	10x25	SCCHBR3R8706MRH100025E
	110	220	90	0.55	4.0	6.5	10x30	SCCHBR3R8117MRH100030E
	120	200	80	0.6	5.0	7.0	12.5x25	SCCHBR3R8127MRH125025E
220	100	60	1.1	8.0	12.0	16x25	SCCHBR3R8227MRH160025E	