



MICROLYTE 6/12 MP SERIES

Sealed Maintenance Free Rechargeable Battery

The SEC Microlyte MP series of VRLA AGM monoblocs is a classic top terminal range, designed for when a cost effective but reliable solution is required. It has been engineered with lead calcium plates to offer competitive battery solutions combining superior gas recombination technology and great energy density. Reliable, versatile and maintenance free – it is difficult to beat!

DESIGN LIFE

8 Years in Float Service at 25°C
 200 Cycles @ 80% DoD at 25°C

MANUFACTURED TO

BS 6290 Part 4 (with V0 option)
 IEC 60896-21/22-2004
 Eurobat
 UL Component approval
 ISO 9001:2008
 ISO 14001:2004

DESIGN SPECIFICATIONS

Float charge voltage
 Cyclic charge voltage
 Terminal

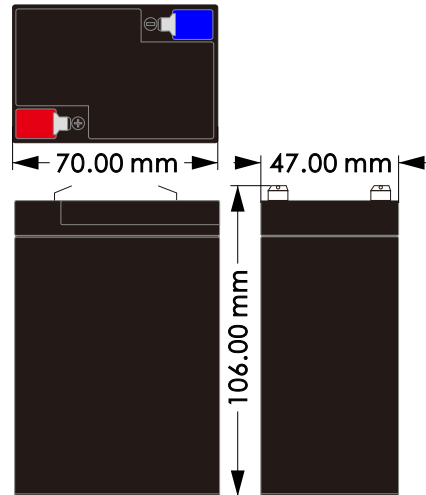
2.25-2.30 vpc ±1% at 25°C
 2.40-2.50 vpc ±1% at 25°C
 ST1

CHARACTERISTICS

Model		SEC-6-MP-4.5
Nominal voltage		6 Volt
Nominal Capacity C/10 at 25°C		4.20 Ah
Capacity	20hr	4.50 Ah to 1.75 vpc
	10hr	4.20 Ah to 1.75 vpc
	5hr	3.81 Ah to 1.75 vpc
	3hr	3.35 Ah to 1.75 vpc
	1hr	2.72 Ah to 1.75 vpc
Maximum charging current		0.74 Amp
Max. discharge current in 5 sec.		75 Amp
Internal resistance		27.0 ~37.0 mΩ*
Charging voltage	Standby use	6.75 - 6.90 VDC at 25°C
	Cyclic use	7.20 - 7.50 VDC at 25°C
Battery dimension	Length	70.0 mm
	Width	47.0 mm
	Overall height	106 mm
	Weight	0.70 kg

* Actual Battery dimensions may be +/- 5% of the number shown
 * For OQC standard

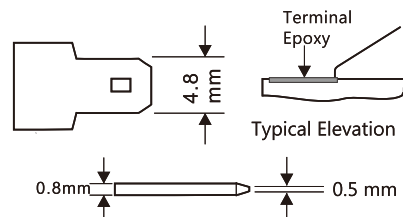
SEC 6-MP-4.5



APPLICATIONS

UPS Systems/ Telecommunication PABX/
 Emergency Lighting/ Fire & Security
 Alarms System/ Portable VTR/TV / Power
 Tools/ Computer/ Fans/ Electronics
 torch/ Window washer

TERMINAL TYPE (ST1)



Current

Amps at 25°C

SEC bloc type	Discharge amps at 25°C																	
	End volts /Cell	Discharge time in minutes						End Volts /Cell	Discharge time in hours									
		5min	10min	15min	20min	30min	45min		1hr	1.5hr	2hr	3hr	4hr	5hr	6hr	8hr	10hr	20hr
6-MP-4.5	1.80	14.3	9.07	7.35	5.81	4.25	3.06	1.85	2.60	1.90	1.47	1.03	0.84	0.71	0.60	0.47	0.40	0.22
	1.75	15.2	9.61	7.76	6.13	4.42	3.13	1.80	2.67	1.96	1.51	1.09	0.87	0.74	0.62	0.48	0.41	0.22
	1.67	15.9	10.0	8.08	6.35	4.55	3.19	1.75	2.72	2.02	1.54	1.12	0.90	0.76	0.64	0.49	0.42	0.23

Power

Watts/cell at 25°C

SEC bloc type	Discharge watts/cell at 25°C																	
	End volts /Cell	Discharge time in minutes						End Volts /Cell	Discharge time in hours									
		5min	10min	15min	20min	30min	45min		1hr	1.5hr	2hr	3hr	4hr	5hr	6hr	8hr	10hr	20hr
6-MP-4.5	1.80	26.7	17.0	13.9	11.0	8.01	5.50	1.85	4.81	3.64	2.75	2.02	1.62	1.38	1.16	0.93	0.79	0.42
	1.75	28.3	18.0	14.0	11.6	8.10	5.65	1.80	4.96	3.72	2.82	2.08	1.67	1.42	1.20	0.95	0.81	0.43
	1.67	29.5	18.8	14.1	12.0	8.20	5.84	1.75	5.08	3.81	2.92	2.14	1.73	1.48	1.25	0.97	0.83	0.44

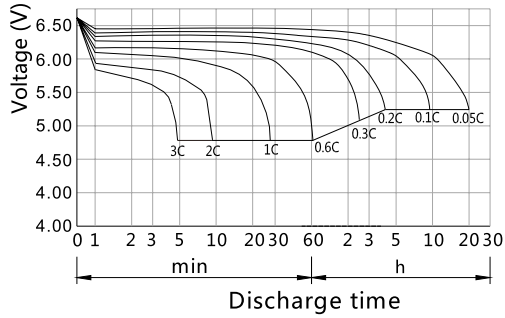
Actual Battery Discharge data may be +/- 5% of the number shown



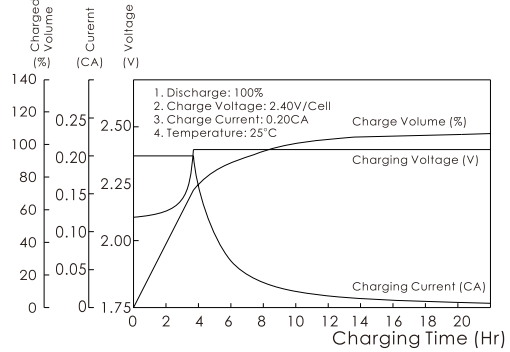
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SEC 6-MP-4.5

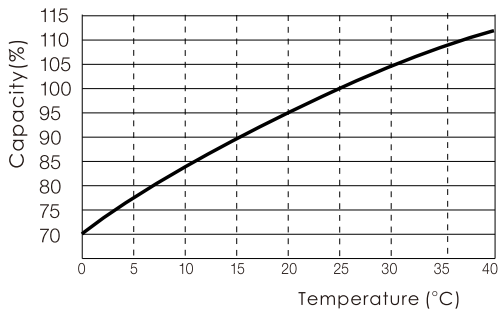
DISCHARGE CHARACTERISTICS (25C)



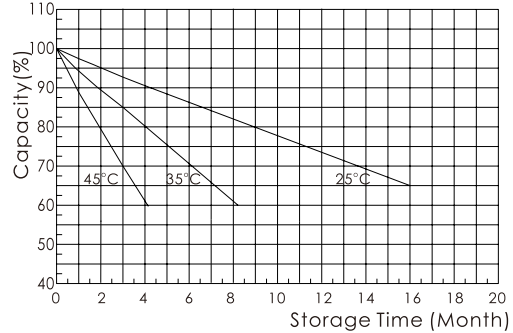
CHARGING CHARACTERISTICS (25C)



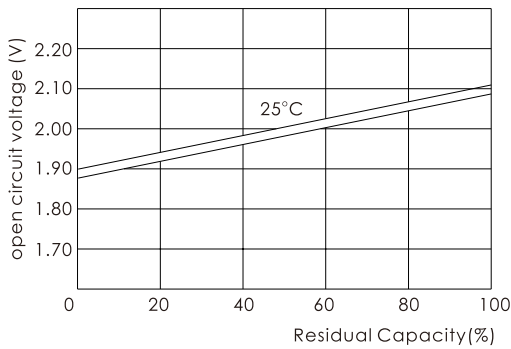
EFFECT OF TEMPERATURE ON CAPACITY



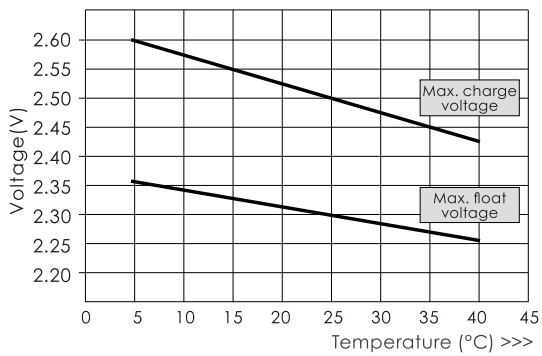
SELF-DISCHARGE CHARACTERISTICS



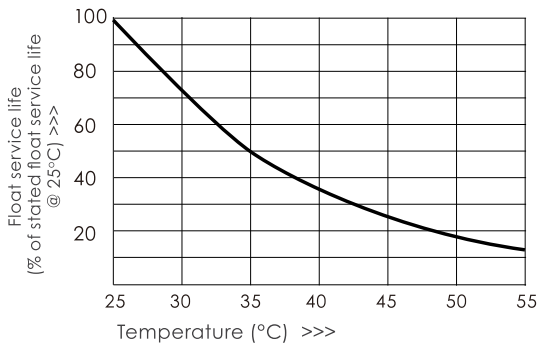
THE RELATIONSHIP FOR OPEN CIRCUIT VOLTAGE AND RESIDUAL CAPACITY (25C)



THE RELATIONSHIP FOR CHARGING VOLTAGE AND TEMPERATURE



FLOATING LIFE ON TEMPERATURE



CYCLE LIFE ON D.O.D. (25C)

