



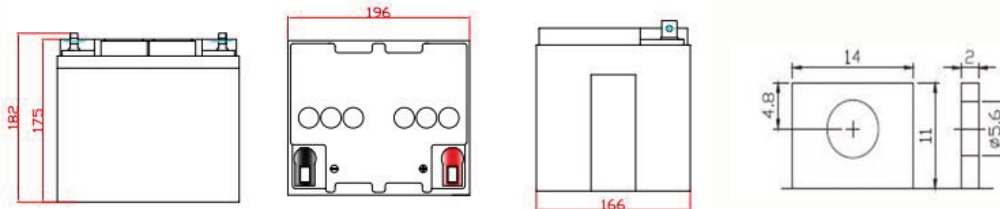
SolAir World's Gel standard battery is designed for a general purpose by SolAir World International. 6FM40G is a general purpose battery up to 8 years in star service or more than 260 cycles at 100% discharge in cycle service. As with all SolAir World's batteries, all are rechargeable highly efficient, leak proof and maintenance free.

Specifications:

Cells per Unit	6
Normal Voltage	12V
Capacity	40Ah@10Hr-rate to 1.80V per cell@25°C
Weight	Approx.(13.3±3%) kg (29.32lbs)
Maximum Discharge Current	400A(5sec)
Internal Resistance	Approx. 8mΩ full charged @25°C
Operating Temperature Range	Discharge: -15°C~50°C Charge: -15°C~40°C Storage: -15°C~40°C
Nominal Operating Temperature Range	25°C±3°C
Float Charging Voltage	13.7~13.9VDC/unit Average @25°C
Maximum Charging Current	12A
Equalization and Cycle Service	14.4V~15.0VDC/unit Average @ 25°C
Self Discharge	SolAir World's Valve Regulated Lead Acid (VRLA) batteries can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3%/per month at 25°C. Please charge batteries before using.
Terminal	Terminal F7/F21
Container Material	ABS(UL94-HB) *Flammability resistance of (UL94-V0) can be available upon request



Dimensions: L196*W166*H176(TH182)mm



Constant Current Discharge Characteristics (A, 25 °C)

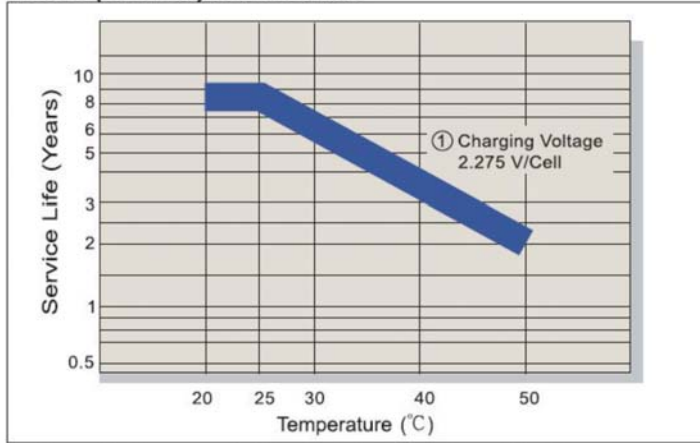
F.V/TIME	5min	10min	15min	30min	60min	2h	3h	5h	8h	10h	20h
9.60	119.2	98.4	77.3	47.0	26.0	15.6	11.8	7.6	4.87	4.06	2.13
9.90	115.6	95.4	75.7	46.1	25.5	15.6	11.7	7.5	4.85	4.04	2.12
10.2	113.2	93.5	74.2	45.1	25.0	15.4	11.6	7.4	4.83	4.02	2.11
10.5	106.7	90.5	71.9	43.7	24.2	15.2	11.5	7.4	4.81	4.01	2.11
10.8	97.7	87.9	70.5	42.9	23.7	15.1	11.4	7.3	4.80	4.00	2.10

Constant Power Discharge Characteristics (Watt, 25 °C)

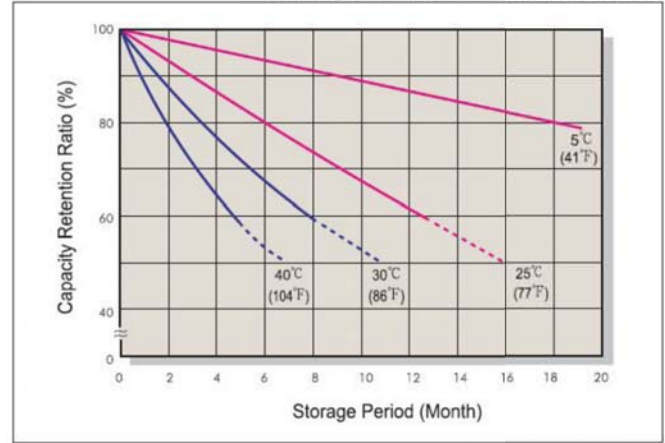
F.V/TIME	5min	10min	15min	30min	60min	2h	3h	5h	8h	10h	20h
9.60	1287	1075	858	527	296	181	138	89	58.5	48.5	25.6
9.90	1249	1042	832	517	290	180	138	89	58.2	48.2	25.5
10.2	1223	1021	815	506	285	178	136	88	57.9	48.0	25.4
10.5	1152	989	789	490	276	177	135	87	57.8	47.9	25.3
10.8	1056	960	774	481	270	175	134	86	57.6	47.8	25.2

Solar Battery 6FM40A/G (12V40Ah)

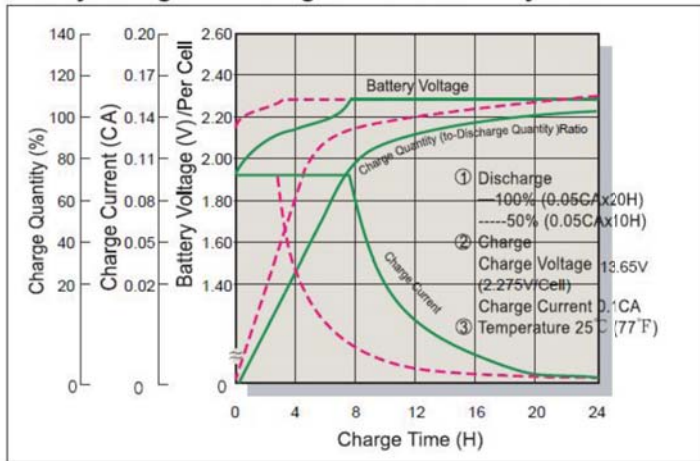
Trickle (or Float) Service Life



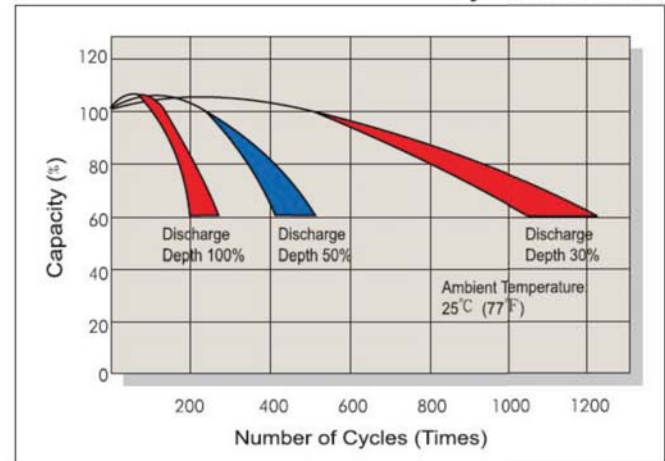
Capacity Retention Characteristic



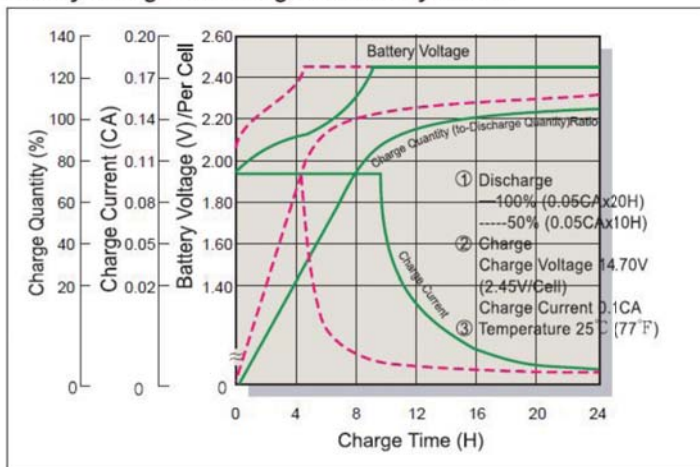
Battery Voltage and Charge Time for Standby Use



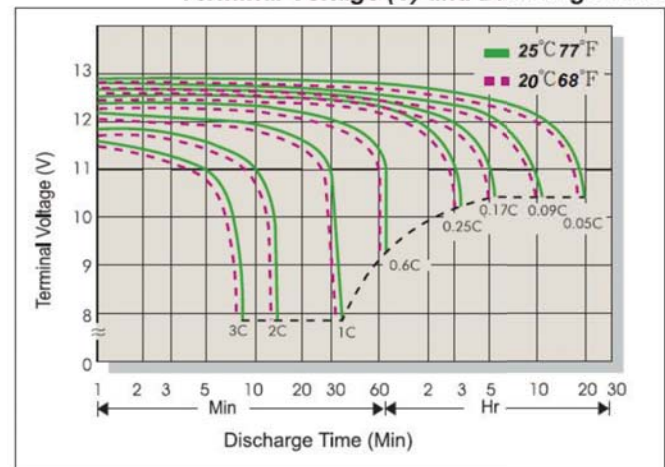
Cycle Service Life



Battery Voltage and Charge Time for Cycle Use



Terminal Voltage (V) and Discharge Time



Charging Procedures

Application	Charge Voltage(V/cell)			Max. Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C(77°F)	2.45	2.40~2.50	0.25C
Standby	25°C(77°F)	2.275	2.25~2.30	

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75	1.70	1.65	1.60
Discharge Current (A)	0.2C > (A)	0.2C < (A)	0.5C < (A)	(A) > 1.0C