



**KEY POWER**

# Shenzhen Key Power Co.,LTD.

## KM12-33 (12V33AH)

### Specification

Nominal Voltage	12V	
Nominal Capacity(20HR)	33.0AH	
Dimensions	Length	195±2mm (7.68 inches)
	Width	130±2mm (5.12 inches)
	Container Height	164±2mm (6.46 inches)
	Total Height (with Terminal)	178±2mm (7.01 inches)
Approx Weight	Approx 11.2 kg (24.7lbs)	
Terminal	T5 / T8	
Container Material	ABS	
Rated Capacity	33.0 AH/3.30A	(10hr, 1.80V/cell, 25°C/77°F)
	29.8 AH/5.95A	(5hr, 1.75V/cell, 25°C/77°F)
	22.0 AH/22.0A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	525A (5s)	
Internal Resistance	Approx 11mΩ	
Operating Temp. Range	Discharge	-15~50°C (5~122°F)
	Charge	0~40°C (32~104°F)
	Storage	-15~40°C (5~104°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 10.5A. Voltage 14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C	
	Standby Use No limit on Initial Charging Current Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	KEY POWER batteries may be stored for up to 6 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	



### Applications

- ◆ All purpose
- ◆ Uninterruptable Power Supply (UPS)
- ◆ Electric Power System (EPS)
- ◆ Emergency backup power supply
- ◆ Emergency light
- ◆ Railway signal
- ◆ Aircraft signal
- ◆ Alarm and security system
- ◆ Electronic apparatus and equipment
- ◆ Communication power supply
- ◆ DC power supply
- ◆ Auto control system



### Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	66.7	51.2	42.4	36.7	28.3	20.9	17.6	10.4	8.14	6.62	5.40	4.69	3.78	3.16	1.73
1.80V/cell	89.5	65.4	51.2	43.3	33.4	24.3	19.7	11.4	8.76	7.07	5.80	5.03	4.01	3.26	1.75
1.75V/cell	100.9	71.9	56.0	46.6	34.7	25.2	20.6	11.8	8.93	7.23	5.95	5.16	4.08	3.34	1.77
1.70V/cell	111.1	78.3	59.7	49.0	36.1	26.2	21.3	12.1	9.17	7.42	6.10	5.27	4.13	3.41	1.80
1.65V/cell	122.5	84.5	63.5	52.0	38.1	26.9	21.8	12.3	9.57	7.68	6.27	5.39	4.20	3.48	1.82
1.60V/cell	135.1	91.8	67.9	55.4	40.3	28.0	22.0	12.8	9.86	7.92	6.48	5.50	4.24	3.52	1.83

### Constant Power Discharge (Watts/cell) at 25 °C (77°F)

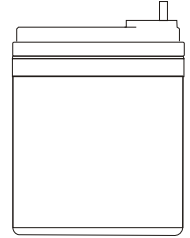
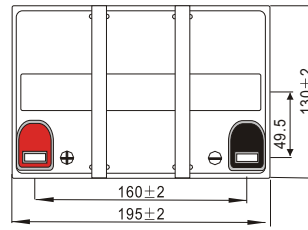
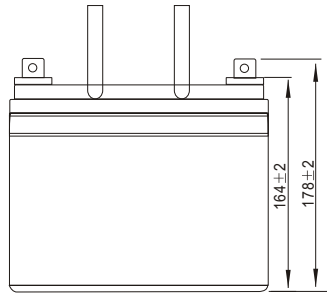
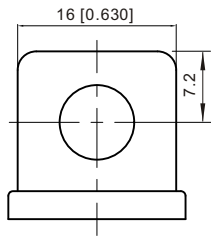
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	121.9	94.5	79.1	69.1	54.0	40.1	34.0	20.2	15.9	12.9	10.6	9.21	7.46	6.25	3.43
1.80V/cell	161.8	119.4	94.3	80.5	62.8	46.3	37.8	21.9	17.0	13.7	11.3	9.84	7.89	6.43	3.46
1.75V/cell	178.6	129.1	101.7	85.8	64.6	47.6	39.4	22.6	17.2	14.0	11.6	10.1	8.01	6.60	3.49
1.70V/cell	191.2	137.5	107.1	89.4	66.9	49.3	40.5	23.2	17.7	14.4	11.8	10.3	8.11	6.72	3.55
1.65V/cell	207.9	147.0	113.0	94.3	70.0	50.1	41.1	23.4	18.4	14.8	12.1	10.5	8.22	6.85	3.60
1.60V/cell	224.0	156.0	118.9	99.4	73.4	51.9	41.3	24.2	18.8	15.2	12.5	10.7	8.28	6.91	3.61



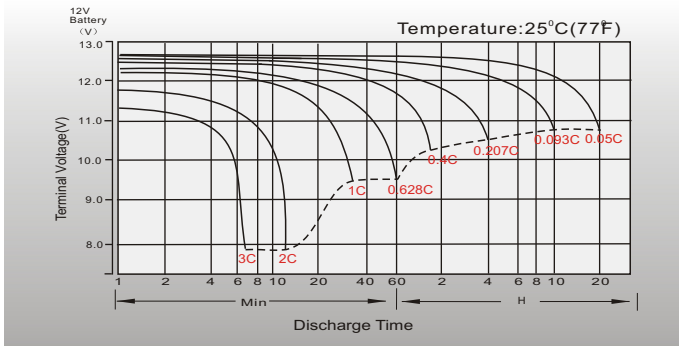
# Dimensions

## T5 Terminal

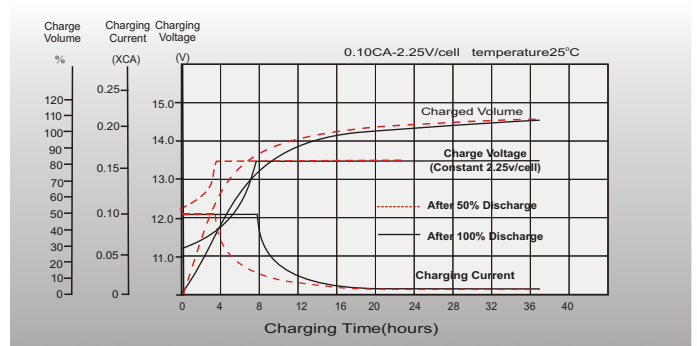
Unit: mm [inches]



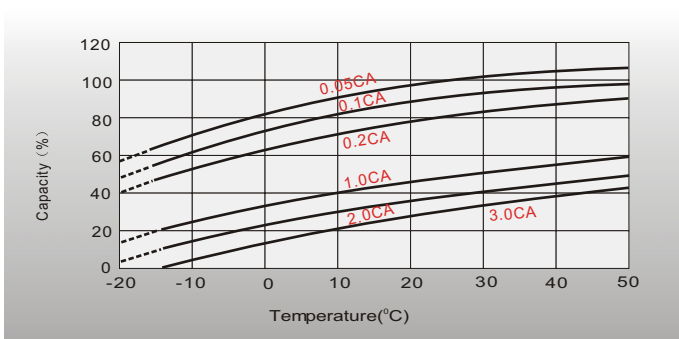
## Discharge Characteristics



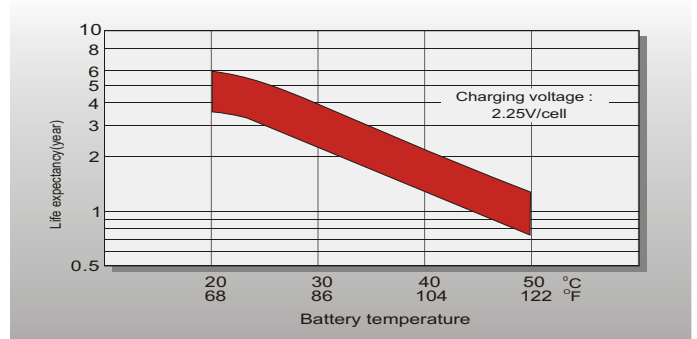
## Float Charging Characteristics



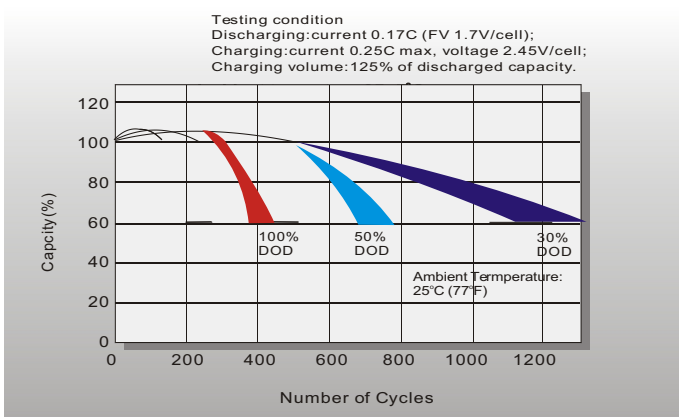
## Temperature Effects in Relation to Battery Capacity



## Effect of Temperature on Long Term Float Life



## Cycle Life in Relation to Depth of Discharge



## Self Discharge Characteristics

