



TL 12-200 (12V200Ah) TANZALITE®

TL 12-200 is a general purpose battery with 10 years design life time in float charging use. As with all Tanzalite batteries, all TL models are rechargeable, highly efficient, leak proof and maintenance free.

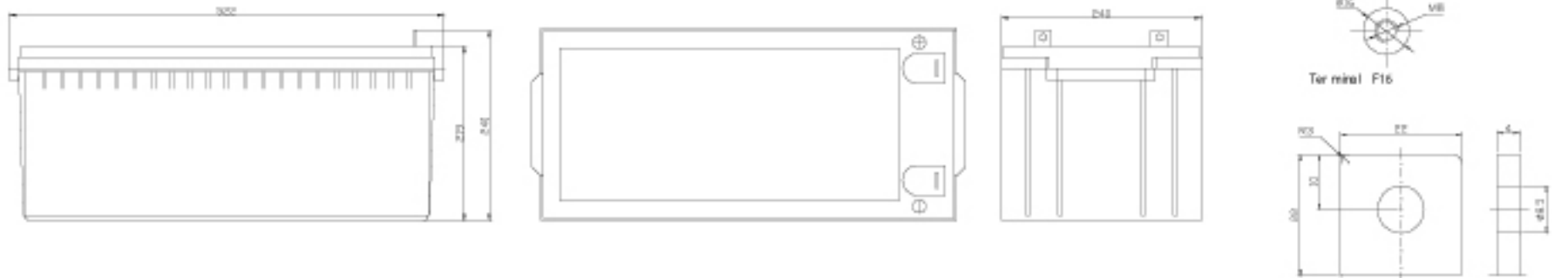
Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	200Ah@10hr-rate to 1.75V per cell @25°C
Weight	Approx. 60 Kg
Max. Discharge Current	1000 A (5 sec)
Internal Resistance	Approx. 4 m
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25°C ± 5°C
Float charging Voltage	13.6 to 13.8 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	60 A
Equalization and Cycle Service	14.4 to 15.0 VDC/unit Average at 25°C
Self Discharge	TANZALITE batteries can be stored for more than 6 months at 25°C. Please charge batteries before using. For higher temperature, the time interval will be shorter.
Terminal	Faston F16/F12
Container Material	A.B.S. (UL94-HB) Flammability resistance of UL94-V1 can be available upon request.



Dimensions

Unit: mm



Constant Current Discharge Characteristics Unit: A(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	748	536	390	230	130.0	79.8	52.2	43.2	34.0	24.6	20.8	11.0
1.67V	728	510	382	226	129.4	79.2	52.0	43.0	33.8	24.4	20.6	10.8
1.70V	686	492	376	224	128.2	78.6	51.6	42.8	33.6	24.2	20.4	10.6
1.75V	616	454	358	219	127.0	78.0	51.4	42.4	33.2	24.0	20.2	10.4
1.80V	556	414	330	209	124.0	76.6	50.0	41.4	32.6	23.6	20.0	10.2
1.85V	484	370	296	196	117.8	73.2	47.8	39.4	31.2	22.6	19.4	9.6

Constant Power Discharge Characteristics Unit: W(25°C)

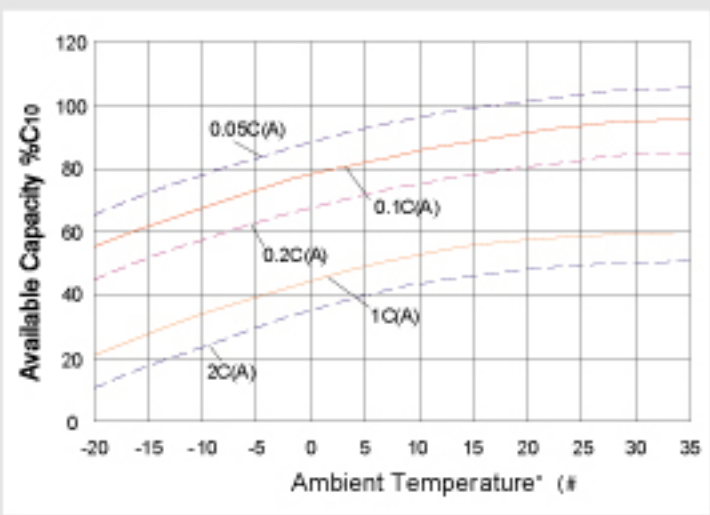
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	1341	981	722	433	247.8	153.0	100.4	83.2	65.6	47.6	39.0	20.6
1.67V	1314	937	707	427	246.6	152.4	100.2	83.0	65.2	47.4	38.6	20.4
1.70V	1240	905	697	422	244.8	151.0	99.6	82.6	65.0	47.0	38.4	20.2
1.75V	1117	837	665	413	242.4	149.6	99.0	82.0	64.4	46.6	38.0	20.0
1.80V	1004	760	611	394	236.4	147.4	96.6	79.8	63.4	45.6	37.6	19.8
1.85V	867	675	546	369	224.0	140.6	91.8	76.0	60.2	44.0	36.4	19.0

All mentioned values are average values.

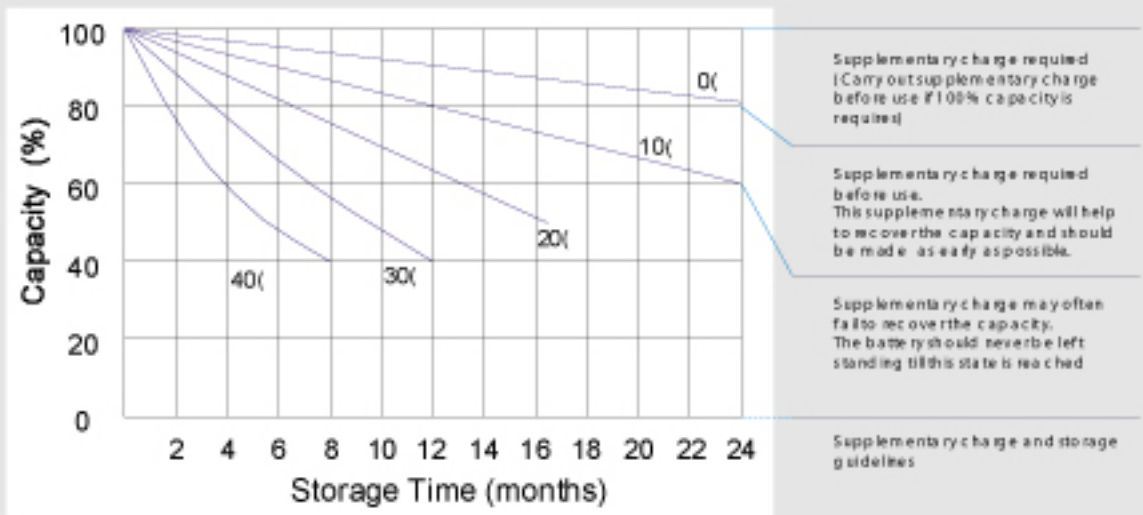
TL 12-200

12V200Ah

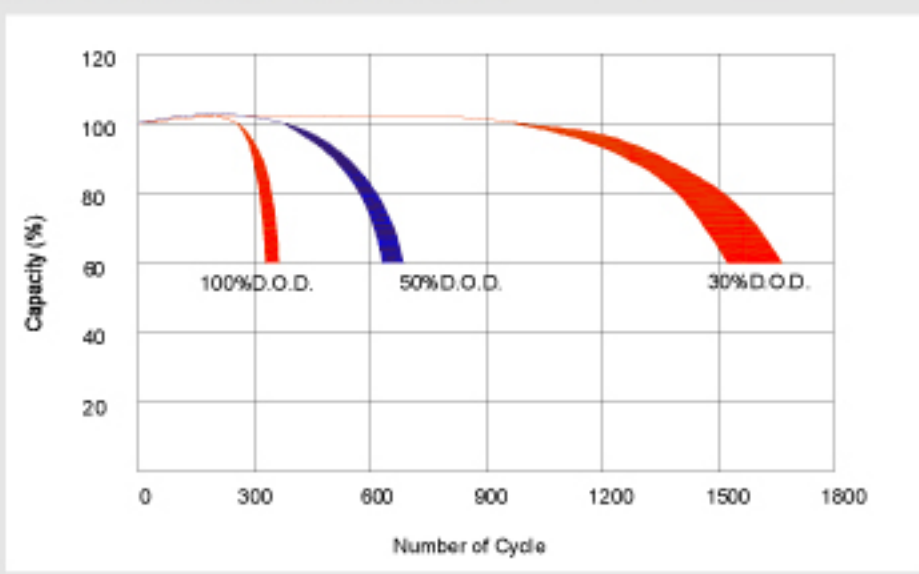
Temperature effects curve



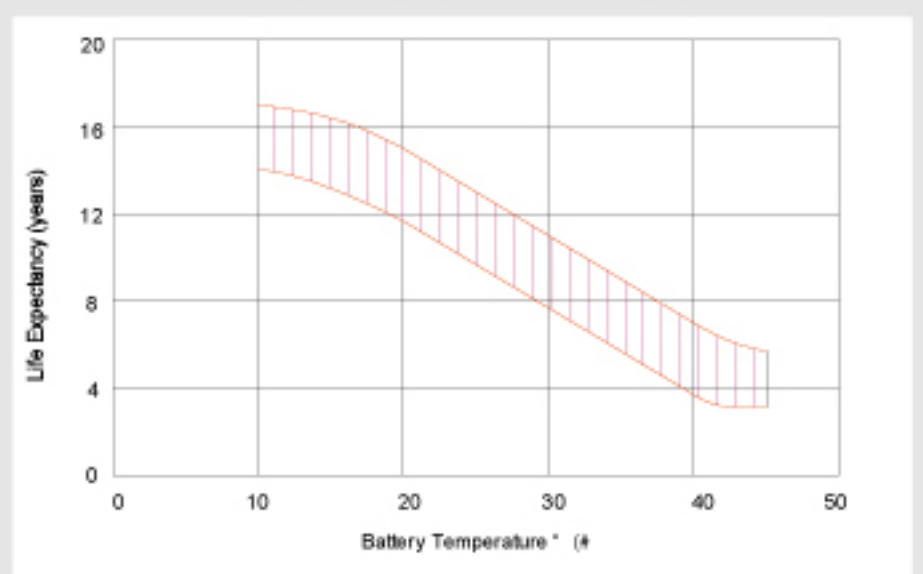
Storage characteristic



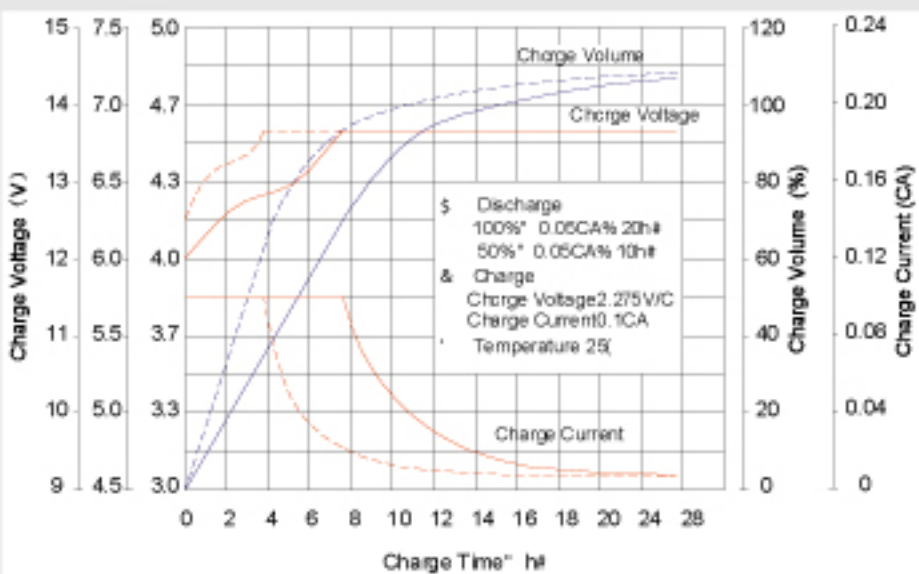
Life characteristics of cyclic use



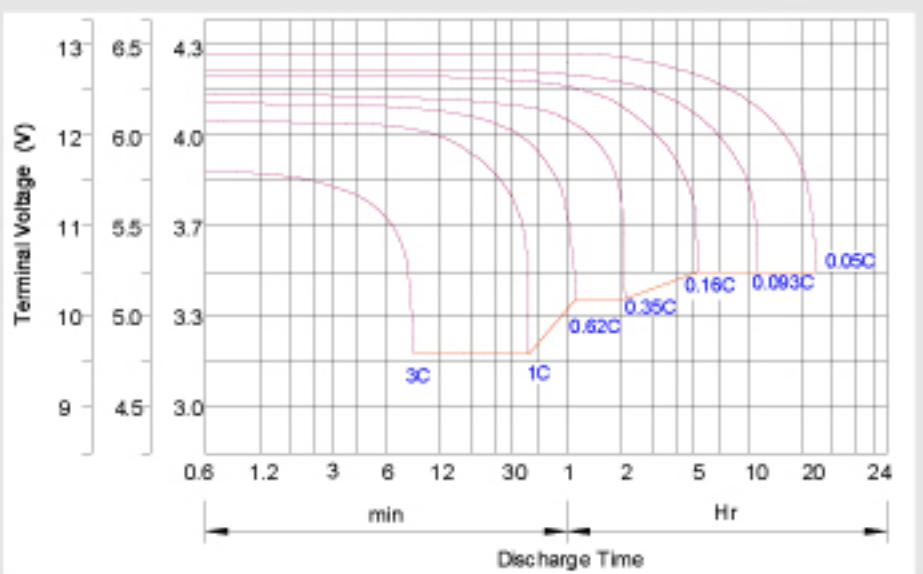
Effect of temperature on long term float life



Charge characteristic Curve for standby use



Discharge characteristic Curve



Charging Procedures(12V series)

Application	Charge Voltage (V)			Max. Charge Current
	Temperature	Set point	Allowable range	
Cycle Use	25°C	14.7	14.4~15.0	0.3C
Standby	25°C	13.7	13.6~13.8	0.3C

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75V	1.70V	1.60V
Discharge Current (A)	" A#* 0.2C	0.2C) * A#) 1.0C	" A#+ 1.0C

Charging Procedures(6V series)

Application	Charge Voltage (V)			Max. Charge Current
	Temperature	Set point	Allowable range	
Cycle Use	25°C	7.35	7.25~7.45	0.3C
Standby	25°C	6.85	6.8~6.9	0.3C

Charge the batteries at least once every six months, if they are stored at 25°C.

Charging Method:

Constant Voltage	-0.2Cx2h+ 14.4~15.0V,24h,Max. Current 0.3CA
Constant Current	-0.2CX2h +0.1CAx12h
Fast	-0.2Cx2h +0.3CAx4h