

# TECHNICAL DATA SHEET

## M27D



### Applications



CYCLIC



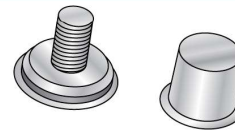
SOLAR



MARINE

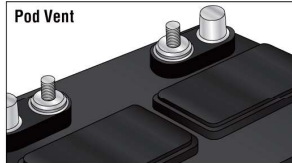
### AVAILABLE TERMINAL STYLES:

Standard

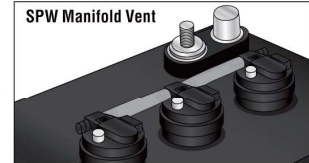


### VENT CAP OPTIONS:

Pod Vent



SPW Manifold Vent



### PHYSICAL SPECIFICATIONS

BCI Group Size	Model Description	Nominal Voltage	Length		Width		Container Height		Terminal Height		Weight		Cover & Container Material	Case to Cover Seal Method
			in	mm	in	mm	in	mm	in	mm	lbs	kgs		
27	M27D	12	12.63	321	6.75	171	8.50	216	9.38	238	52	23.6	Polypropylene Plastic	Heat Seal

### ELECTRICAL SPECIFICATIONS

Ampere Hour Capacity (Ah)							Discharge Capacity Minutes					KWH (kWh)	Internal Resistance
100 Hr	72 Hr	48 Hr	20 Hr	10 Hr	5 Hr	2 Hr	100A	75A	50A	25A	10A	100 Hr	80°F / 27°C
144	133	119	105	89	85	64	28	40	68	165	512	1.728	7.6mΩ

### CHARGING INSTRUCTIONS

We specify the following standard battery charge profile for the M27D deep cycle battery when used in an electric vehicle service:

**Phase 1: Constant Current (I1)** I1 = highest amperage available < 20 amps

**Phase 1: Constant Current (I1)** I1 = minimum amperage available > 10 amps

Normal transition to Phase 2 at 2.37 Volts Per Cell.

Safety transition to END OF CHARGE of  $dV / dt < 0V / 1 \text{ hr}$ ,  $dt = 1 \text{ hr}$ . (NEGATIVE SLOPE).

Timeout for Phase 1 = 10 hours.

**Phase 2: Constant Voltage (U2)** U2 = 2.37 VPC

Normal Transition to Phase 3 at I2 = 4.0 amps or approximate. Safety transition to END OF CHARGE of  $dI / dt < 0.4 \text{ amp} / 1 \text{ hr}$ ,  $dt = 1 \text{ hr}$ .

**Phase 3: Constant Current (I3)** I3 = 4.0 amps or approximate.

Normal transition to END OF CHARGE at 115 - 118% of AH returned.

Timeout for charging phases 1 - 3 at 16 hours.

Temperature compensation coefficient =  $\pm 3 \text{ mV} / ^\circ\text{C}$ .

Recommended Equalization Charge: Every seven (7) days. 4 additional hours at normal finish rate of 4.0 amps for 4 hours.

Safety transition to END OF CHARGE at maximum voltage of 2.7 VPC.