

Manganese Lithium Rechargeable Batteries (ML Series)

TAB CONFIGURATIONS

Model No.	Tab Type		Configuration Diagram No.	Nominal	
	With Insulation Wrap	Without Insulation Wrap		Voltage (V)	Capacity (mAh)
ML414S ¹		/F9D	1	3	1.2
ML421S ¹	Contact Panasonic for details on available tab configurations.			3	2.3
ML612S			2	3	2.6
ML614S			3	3	3.4
ML616S			4	3	2.9
ML621S		/F9D	5	3	5.0
ML920S		/F9F	6	3	11.0
ML1220	/F1A	/F9D	7	3	17.0
ML1220	/V1A	/F9D	8	3	17.0
ML1220	/F1B	/F9D	9	3	17.0
ML2020	/V1A		10	3	45.0
ML2020	/G1A		11	3	45.0
ML2020	/H1C		12	3	45.0

¹Contact Panasonic for the latest information on these models.

Notes:

- A) To ensure proper electrical contact, it is recommended that rechargeable coin cell batteries be used with tabs for PC Board mounting. Please consult Panasonic before planning a design that will use bare coin cells without tabs (e.g. using a holder).
- B) Please contact Panasonic for requests on custom tab configurations. Minimum order requirements may apply.

ML Series Tab Configurations

DIMENSIONS / MM

Model No.	Dimensions/mm	Model No.	Dimensions/mm
ML414S/F9D		ML612S/F9D	
ML614S/F9F		ML616S/F9D	
ML621S/F9D		ML920S/F9D	
ML1220/F1A		ML1220/V1A	

ML Series Tab Configurations

DIMENSIONS / MM

Model No.	Dimensions/mm	Model No.	Dimensions/mm
ML1220/F1B	Technical drawing of ML1220/F1B tab configuration. Dimensions include: 12.5 ± 0.3, 4.5 ± 0.2, 2.6 ± 0.3, 2, 0.75 ± 0.1, 3.8 ± 0.5, 3.5 ± 0.3, 1.5 ± 0.5, 2 ± 1, 0.15 ± 0.05, 2.6 ± 0.5, 4.55, and 1.5. Labels include 'Insulation Wrap (lavender)' and 'Pre-soldered'.	ML2020/V1A	Technical drawing of ML2020/V1A tab configuration. Dimensions include: Ø20 ± 0.3, 4, 2, 2.9, 1.5, 1.8, 10.2 ± 0.5, 0.75, 0.2, and 2.7. Labels include 'Insulation Wrap (lavender)'.
ML2020/G1A	Technical drawing of ML2020/G1A tab configuration. Dimensions include: 20 ± 0.3, 2, 2.7 ± 0.3, 4 ± 0.2, 3 ± 1, 0.2 ± 0.1, 2.5 ± 1, 0.75 ± 0.2, 5.08 ± 0.7, 10.16 ± 0.2, 3.5 ± 0.3, and 0.75 ± 0.2. Labels include 'Insulation Wrap (Lavender)' and 'Pre-soldered'.	ML2020/H1C	Technical drawing of ML2020/H1C tab configuration. Dimensions include: 20.5 ± 1, 20 ± 0.3, 4 ± 0.2, 2.7 ± 0.3, 1.7 ± 0.3, 0.75 ± 0.2, 20.5 ± 1, 0.2 ± 0.1, 1.8 ± 0.2, 3.0 ± 0.6, 1.7 ± 0.3, and 2.7 ± 1. Labels include 'Insulation Wrap (lavender)' and 'Pre-soldered'.