

## Electron

Quantity	Symbol	Value	Units	Rel.Uncertainty (ppm)
electron mass	$m_e$	9.1093897(54)	$10^{-31}\text{kg}$	0.59
		5.48579903(13)	$10^{-4}\text{u}$	0.023
in electron volts, $m_e c^2/\{e\}$		0.51099906(15)	MeV	0.30
electron-muon mass ratio	$m_e/m_\mu$	4.83633218(71)	$10^{-3}$	0.15
electron-proton mass ratio	$m_e/m_p$	5.44617013(11)	$10^{-4}$	0.020
electron-deuteron mass ratio	$m_e/m_d$	2.72443707(6)	$10^{-4}$	0.020
electron- $\alpha$ -particle mass ratio	$m_e/m_\alpha$	1.37093354(3)	$10^{-4}$	0.021
electron specific charge	$-e/m_e$	-1.75881962(53)	$10^{11}\text{Ckg}^{-1}$	0.30
electron molar mass	$M(e), M_e$	5.48579903(13)	$10^{-7}\text{kg/mol}$	0.023
Compton wave length, $h/m_e c$	$\lambda_C$	2.42631058(22)	$10^{-12}\text{m}$	0.089
$\lambda_C/2\pi = \alpha a_0 = \alpha^2/4\pi R_\infty$	$\lambda_C$	3.86159323(35)	$10^{-13}\text{m}$	0.089
classical electron radius, $\alpha^2 a_0$	$r_e$	2.81794092(38)	$10^{-15}\text{m}$	0.013
Thomson cross section, $(8\pi/3)r_e^2$	$\sigma_e$	0.66524616(18)	$10^{-28}\text{m}^2$	0.27
electron-magnetic moment	$\mu_e$	928.47701(31)	$10^{-26}\text{JT}^{-1}$	0.34
in Bohr magnetons	$\mu_e/\mu_B$	1.001159652193(10)		$1 \times 10^{-5}$
in nuclear magnetons	$\mu_e/\mu_N$	1838.282000(37)		0.020
electron magnetic moment anomaly, $\mu_e/\mu_B - 1$	$a_e$	1.159652193(10)	$10^{-3}$	0.0086
electron g-factor, $2(1 + a_e)$	$g_e$	2.002319304386(20)		$1 \times 10^{-5}$
electron-muon magnetic moment ratio	$\mu_e/\mu_\mu$	206.766967(30)		0.15
electron-proton magnetic moment ratio	$\mu_e/\mu_p$	658.2106881(66)		0.010