

**Table 1.** Median values and 68% confidence interval for OGLE-TR-1067.

Parameter	Units	Values
Stellar Parameters:		
$M_*$ . . . . .	Mass ( $M_\odot$ ) . . . . .	$1.25^{+0.24}_{-0.19}$
$R_*$ . . . . .	Radius ( $R_\odot$ ) . . . . .	$5.52^{+0.61}_{-0.75}$
$R_{*,SED}$ . . . . .	Radius <sup>1</sup> ( $R_\odot$ ) . . . . .	$5.58^{+0.66}_{-0.75}$
$L_*$ . . . . .	Luminosity ( $L_\odot$ ) . . . . .	$12.2^{+3.3}_{-3.0}$
$F_{Bol}$ . . . . .	Bolometric Flux (cgs) . . . . .	$0.000000000508^{+0.00000000000044}_{-0.00000000000048}$
$\rho_*$ . . . . .	Density (cgs) . . . . .	$0.0104^{+0.0060}_{-0.0027}$
$\log g$ . . . . .	Surface gravity (cgs) . . . . .	$3.051^{+0.14}_{-0.099}$
$T_{eff}$ . . . . .	Effective Temperature (K) . . . . .	$4620 \pm 140$
$T_{eff,SED}$ . . . . .	Effective Temperature <sup>1</sup> (K) . . . . .	$4590^{+140}_{-150}$
[Fe/H] . . . . .	Metallicity (dex) . . . . .	$0.36^{+0.16}_{-0.20}$
[Fe/H] <sub>0</sub> . . . . .	Initial Metallicity <sup>2</sup> . . . . .	$0.29^{+0.14}_{-0.18}$
Age . . . . .	Age (Gyr) . . . . .	$6.0^{+4.7}_{-2.8}$
EEP . . . . .	Equal Evolutionary Phase <sup>3</sup> . . . . .	$503.7^{+13}_{-7.2}$
$A_V$ . . . . .	V-band extinction (mag) . . . . .	$1.99^{+0.17}_{-0.21}$
$\sigma_{SED}$ . . . . .	SED photometry error scaling . . . . .	$6.38^{+0.95}_{-0.78}$
$\varpi$ . . . . .	Parallax (mas) . . . . .	$0.358^{+0.052}_{-0.037}$
$d$ . . . . .	Distance (pc) . . . . .	$2800^{+320}_{-360}$
Planetary Parameters:		
		b
$P$ . . . . .	Period (days) . . . . .	$2.573161^{+0.000021}_{-0.000020}$
$R_p$ . . . . .	Radius ( $R_J$ ) . . . . .	$2.51^{+0.44}_{-0.49}$
$M_p$ . . . . .	Mass <sup>4</sup> ( $M_J$ ) . . . . .	$237^{+48}_{-52}$
$T_C$ . . . . .	Time of conjunction <sup>5</sup> (BJD <sub>TDB</sub> ) . . . . .	$2455376.738^{+0.014}_{-0.015}$
$T_T$ . . . . .	Time of minimum projected separation <sup>6</sup> (BJD <sub>TDB</sub> ) . . . . .	$2455376.738^{+0.014}_{-0.015}$
$T_0$ . . . . .	Optimal conjunction Time <sup>7</sup> (BJD <sub>TDB</sub> ) . . . . .	$2456992.6831^{+0.0064}_{-0.0063}$
$a$ . . . . .	Semi-major axis (AU) . . . . .	$0.0417^{+0.0023}_{-0.0018}$
$i$ . . . . .	Inclination (Degrees) . . . . .	$56.0^{+7.1}_{-5.1}$
$T_{eq}$ . . . . .	Equilibrium temperature <sup>8</sup> (K) . . . . .	$2550^{+130}_{-160}$
$\tau_{circ}$ . . . . .	Tidal circularization timescale (Gyr) . . . . .	$0.70^{+0.73}_{-0.30}$
$K$ . . . . .	RV semi-amplitude <sup>4</sup> (m/s) . . . . .	$22400^{+2800}_{-3500}$
$R_p/R_*$ . . . . .	Radius of planet in stellar radii . . . . .	$0.0466^{+0.0035}_{-0.0038}$
$a/R_*$ . . . . .	Semi-major axis in stellar radii . . . . .	$1.63^{+0.24}_{-0.14}$
$\delta$ . . . . .	$(R_p/R_*)^2$ . . . . .	$0.00217 \pm 0.00034$
$\delta_I$ . . . . .	Transit depth in I (fraction) . . . . .	$0.00160 \pm 0.00015$
$\delta_V$ . . . . .	Transit depth in V (fraction) . . . . .	$0.00103^{+0.00045}_{-0.00047}$
$\tau$ . . . . .	Ingress/egress transit duration (days) . . . . .	$0.075^{+0.041}_{-0.032}$
$T_{14}$ . . . . .	Total transit duration (days) . . . . .	$0.325^{+0.025}_{-0.022}$

Table 1 continued on next page

Table 1 (continued)

Parameter	Units	Values	
$T_{FWHM}$ ..	FWHM transit duration (days) .....	0.250 <sup>+0.023</sup> <sub>-0.028</sub>	
$b$ .....	Transit Impact parameter .....	0.909 <sup>+0.028</sup> <sub>-0.063</sub>	
$\delta_{S,2.5\mu m}$ ..	Blackbody eclipse depth at 2.5 $\mu m$ (ppm) .....	640 <sup>+160</sup> <sub>-170</sub>	
$\delta_{S,5.0\mu m}$ ..	Blackbody eclipse depth at 5.0 $\mu m$ (ppm) .....	900 <sup>+200</sup> <sub>-210</sub>	
$\delta_{S,7.5\mu m}$ ..	Blackbody eclipse depth at 7.5 $\mu m$ (ppm) .....	1000 <sup>+210</sup> <sub>-220</sub>	
$\rho_P$ .....	Density <sup>4</sup> (cgs) .....	18.2 <sup>+8.2</sup> <sub>-4.8</sub>	
$\log g_P$ ..	Surface gravity <sup>4</sup> .....	4.965 <sup>+0.074</sup> <sub>-0.063</sub>	
$\Theta$ .....	Safronov Number .....	6.30 <sup>+0.82</sup> <sub>-0.83</sub>	
$\langle F \rangle$ .....	Incident Flux (10 <sup>9</sup> erg s <sup>-1</sup> cm <sup>-2</sup> ) .....	9.6 <sup>+2.0</sup> <sub>-2.2</sub>	
$T_P$ .....	Time of Periastron (BJD <sub>TDB</sub> ) .....	2455376.738 <sup>+0.014</sup> <sub>-0.015</sub>	
$T_S$ .....	Time of eclipse (BJD <sub>TDB</sub> ) .....	2455375.451 <sup>+0.014</sup> <sub>-0.015</sub>	
$T_A$ .....	Time of Ascending Node (BJD <sub>TDB</sub> ) .....	2455378.668 $\pm$ 0.014	
$T_D$ .....	Time of Descending Node (BJD <sub>TDB</sub> ) .....	2455377.381 $\pm$ 0.014	
$V_c/V_e$ ..	.....	1.00	
$M_P \sin i$ ..	Minimum mass <sup>4</sup> ( $M_J$ ) .....	196 <sup>+28</sup> <sub>-31</sub>	
$M_P/M_*$ ..	Mass ratio <sup>4</sup> .....	0.180 <sup>+0.047</sup> <sub>-0.046</sub>	
$d/R_*$ ..	Separation at mid transit .....	1.63 <sup>+0.24</sup> <sub>-0.14</sub>	
$P_T$ .....	A priori non-grazing transit prob .....	0.586 <sup>+0.054</sup> <sub>-0.075</sub>	
$P_{T,G}$ .....	A priori transit prob .....	0.644 <sup>+0.063</sup> <sub>-0.085</sub>	
Wavelength Parameters:		I	V
$u_1$ .....	linear limb-darkening coeff .....	0.468 <sup>+0.052</sup> <sub>-0.054</sub>	0.762 $\pm$ 0.064
$u_2$ .....	quadratic limb-darkening coeff .....	0.194 <sup>+0.049</sup> <sub>-0.051</sub>	0.037 $\pm$ 0.058
Transit Parameters:		OGLE UT 2010-06-29 (I)	OGLE UT 2010-06-29 (V)
$\sigma^2$ .....	Added Variance .....	0.00000714 <sup>+0.00000018</sup> <sub>-0.00000017</sub>	0.0000227 <sup>+0.00000041</sup> <sub>-0.00000035</sub>
$F_0$ .....	Baseline flux .....	1.000124 <sup>+0.000035</sup> <sub>-0.000034</sub>	1.00012 <sup>+0.00043</sup> <sub>-0.00044</sub>

See Table 3 in Eastman, J. et al., 2019, arXiv:1907.09480 for a detailed description of all parameters

<sup>1</sup>This value ignores the systematic error and is for reference only

<sup>2</sup>The metallicity of the star at birth

<sup>3</sup>Corresponds to static points in a star's evolutionary history. See §2 in Dotter, A., 2016, ApJS, 222, 8

<sup>4</sup>Uses measured radius and estimated mass from Chen, J., & Kipping, D. 2017, ApJ, 834, 17

<sup>5</sup>Time of conjunction is commonly reported as the "transit time"

<sup>6</sup>Time of minimum projected separation is a more correct "transit time"

<sup>7</sup>Optimal time of conjunction minimizes the covariance between  $T_C$  and Period

<sup>8</sup>Assumes no albedo and perfect redistribution