

Chevrolet Camaro Z/28

1969



4 Wheels

DIMENSIONS

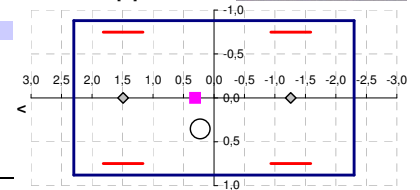
Total height	1,154m	Length	4,600m	Wheelbase	2,750m
Ground clearance	0,154m	Width	1,760m	Front track	1,499m
		Body height	1,000m	Rear track	1,496m

NullPoint (0,0,0)

Supposed at:
of body base

0,650m

UPPER VIEW [m]



WEIGHTS

Body	1.395kg	Engine	1.395kg	SPRUNG WEIGHT	
Front wheels	80kg		+		
Rear wheels	140kg		220kg	UNSPRUNG WEIGHT	
DISTRIBUTION front	57%		1.615kg	TOTAL MASS	
rear	43%				

Steering wheel

Center of gravity [m]

Rotational inertias [kg.m²]

Estimated [kg.m ²]	X pitch	Y yaw	Z roll
	2.512	-0,31	0,31
	(2.994)	(2.994)	(313)

ENGINE

Maximum power	251 CV	7.000rpm	max
Maximum torque	427 N.m	4.500rpm	(186kW)
		3.250rpm	(43mkp)
CONSUMPTION		850rpm	min
Fuel tank	50 L Gasoline	0,0000200	g/J

(default values)

AERODYNAMIC

Frontal area	1,91m ²	longitudinal [Z]	Cx 0,450	vertical [Y]	-Kd 0,3403
COEFFICIENTS					
Body Lift	4,70	span	1,80	Cd	-3,26
Front Spoiler	1,60		0,10		66,00
Rear Spoiler	1,70		0,10		18,50

TRANSMISSION

Drive:	rear	gears	4
Gearbox:	manual	differential ratio	3,73
HELP TO DRIVE:			
without ABS		SHIFT:	
without ASD		At max RPM	

BRAKES

	front	rear	11.656 N	Handbrake:	To wheels rear
BRAKE TORQUE	1.350 N.m	8.282 N	71%		
BRAKE FORCE	550 N.m	3.374 N	29%		

Az [m/s²]

-0,74G

AERODYNAMIC CHANGES

V [km/h]	+/- ΔM [kg]	+/- ΔAx	- ΔAz
100	-27	-1,7%	-0,03G
150	-60	-3,7%	-0,06G
200	-107	-6,6%	-0,11G
250	-167	-10,4%	-0,17G
300	-241	-14,9%	-0,24G

GEAR RATIOS

V [km/h]	+ Az
1 ^a 2,200	105
2 ^a 1,640	141
3 ^a 1,240	186
4 ^a 1,000	231
5 ^a	
6 ^a	
7 ^a	
8 ^a	
9 ^a	
MA -2,27	-102
	-0,70G

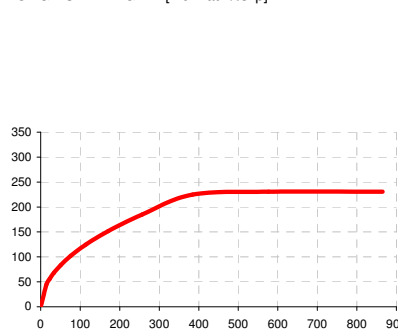
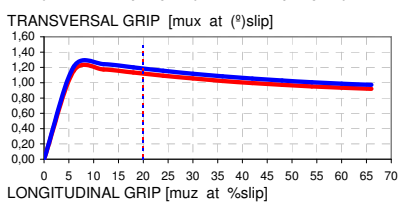
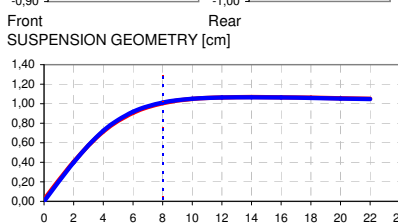
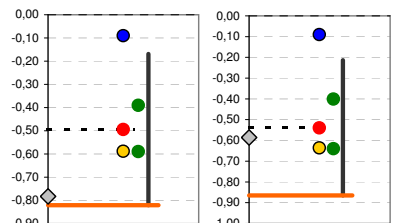
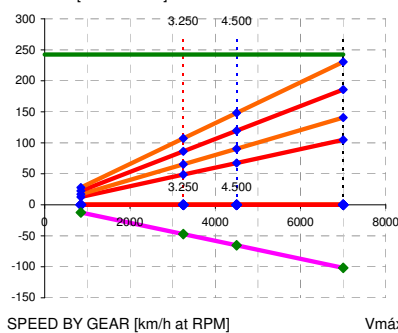
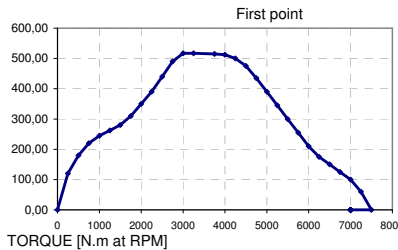
WHEELS ANGLE

° out	° in
1,25	1,39
2,50	2,82
5,00	5,77
10,00	12,14

RESUME

Vertical stiffness	k 104.222 N/m
Frecuencie	w 1,38 Hz
Wheel vertical stiffness	k 780.000 N/m
Frecuencie	w 9,48 Hz

Damping 7%

critical real
24.116 N/m/s
1.673 N/m/sSPEED AT CURVE [km/h at R curve,m]
With Az = 0

COMMENTS BY MODELERS

v1,0
Model & Textures: Cube396 & BigBlock

WHEELS

[m]	Radius	Perimeter	optimal values	SA [rad]	(default values)
Front	0,326	2,048	0,200	0,140	(default values)
Rear	0,326	2,048	0,200	0,140	(default values)
media	0,326	2,048			

TEORICAL PERFORMANCE

Speed	243 km/h	By power	(151mph)
	231 km/h	By transmission	(143mph)
Acceleration	7,47 seg	from 0 a 100 km/h	(6,43s Weight/Power)
	17,10 seg	from 0 to 400 m	
	29,87 seg	from 0 to 1000 m	
Brake	19,2m	from 60 to 0 km/h	
	104,7m	from 140 to 0 km/h	
Adelantament	2,49 seg	from 20 a 50 km/h in 2 ^a	
	4,26 seg	from 60 to 120 km/h in 3 ^a	
	3,61 seg	from 80 to 120 km/h in 4 ^a	
Consumption	1,6 L	at 90km/h	
100 km	2,3 L	at 120km/h	
	2,167	Km at 120km/h	
TRANSVERSAL DYNAMIC			
Roll over	1,79G	Longitudinal	1,01G
V = 231 km/h			
	Amáx 0,64G (208%)		
	Fmáx -0,83G (113%)		
V = 0 km/h	1,79G	1,09G	
	Amáx 0,66G (97%)		
	Fmáx -1,11G (151%)		
	(% of available acceleration/braking)		

MARCH DIAGRAM [Az m/s² at V km/h, and climbing slope %]

version RACER: 050f