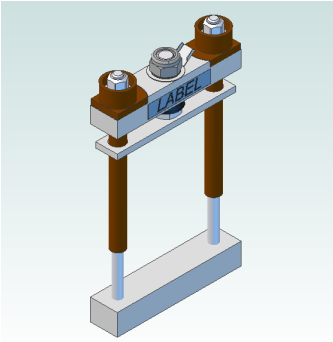
RGCR01...

High isolation press-pack semiconductor mounting clamps

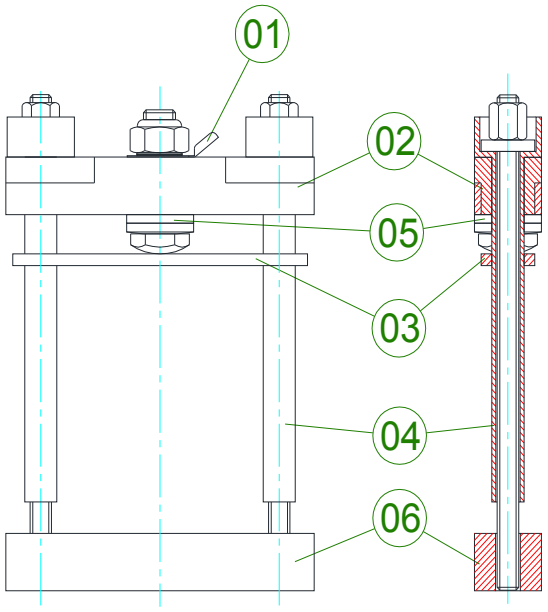
OVERVIEW



non-contractual image

-High reliability
-Corrosion protection zinc treatment (RoHS directive)
-Even pressure distribution.
-Easy mounting.
-Insulation 5000 V_{RMS}/1min
-Clamping range available up to 3000 KgF.
-Clamping force tolerances: -5% +10%

GENERAL DESCRIPTION



01- PRESSURE INDICATOR
It indicates the moment in which the adequate pressure is being performed during the assembly (this pressure is the correct one when you can move the indicator slightly).

02- UPPER CLAMP
It supports the pressure set, it is manufactured in calibrated steel with a superficial protection.

03-UPPER DECK
Its function is to distribute the compression force on the surface, avoiding deformations in the aluminium and copper heat sinks (normally used).

04- ISOLATOR
It is a high performance resin piece it offers a high mechanical resistance, high voltage isolation and high working temperature. (Highest working temperature recommended 130ºC)

05- PRESSURE SYSTEM
It is provided with a high precision calibration from factory. It should not be manipulated under any concept

06- LOWER CLAMP & RODS
It supports the rods, it is manufactured in calibrated steel with a superficial protection.

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STANDARD TYPES

TYPE	Fixing centres	Rod size	Maximum capsule Ø	F_{MIN} (KgF)	F_{MAX} (KgF)	Min. Hole Ø	Sandard F.
RGCR01F	89 mm.	M8	76 mm.	300	3000	13 mm.	450-800-1200-1500 1800-2200-2700
RGCR01L	100 mm.		87 mm.				
RGCR01N	102 mm.		89 mm.				

DIMENSIONS AND ORDERING INFORMATION

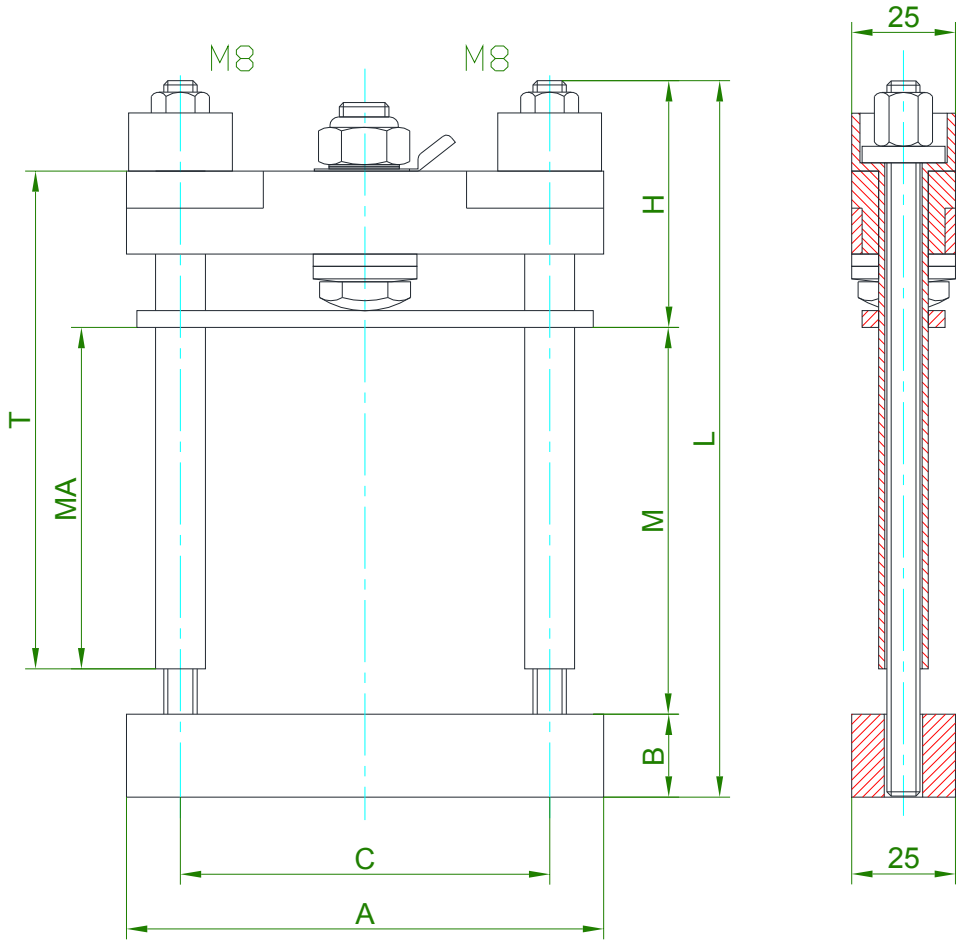


Fig. 1

DATA CALCULATION TABLE

TYPE	D	E	H_{MAX}	M_{MAX}	A	B	C	Style
RGCR01F	82	34	63	86	115	20	89	Fig. 1
RGCR01L	82	34	63	86	125	20	100	
RGCR01N	82	34	63	86	125	20	102	

All dimensions in mm.

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ORDER CODE

RGCR01F 2200 / 180 / 120
(1) (2) (3) (4)

1- Type.
2- Nominal clamping force (Kgrs).
3- "L" dimension.
4- "T" dimension.

"L" and "T" dimensions depend on "M" value (total thickness of semiconductor and heatsinks),and is given by:

L=M+D **T**=M+E

Adjust "L" to superior value in multiple of 5 mm. Adjust "T" to inferior value in multiple of 5 mm.
Maximum standard value of "L": 180 mm. (M8) / 250 mm. (M10). Maximum standard value of "T": 120 mm. (other values on request)

SELECTION CHARTS

"L" VALUE VERSUS "M" DIMENSIONS

TYPE	"M" DIMENSION VALUE															
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95
RGCR01F	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180
RGCR01L																
RGCR01N																

"T" VALUE VERSUS "M" DIMENSIONS

TYPE	"T" DIMENSION VALUE TYPE															
RGCR01F	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120
RGCR01L																
RGCR01N																

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MOUNTING CONSIDERATIONS

For mounting the clamps RGCR01 are used two threaded rods for the pressuring of (M8 or M10 according to type). It works by means of an elastic system that pressures the centre of the device and doesn't require any special tool for correct mounting, This is because a pre-calibrated force indicator is included for safe and easy mounting in your power stack.

Please follow the next steps in order to avoid any problem while mounting it.

1-Clean carefully the contact surface of the heat sink, a mild abrasive type "*Scotch-Brite* (1)" is indicated if the surface is damaged, degrease the surface with acetone or methanol. Avoid contact surfaces (heat sink and semiconductor) with your fingers.

(1) *Scotch-Brite* is a 3M trademark.

2-Arrange small amount of thermal conductive paste on a flat surface (glass or similar), TCZn-60 is recommended and available in our online power store, spread with the help of a foam roller.

3-With roller impregnated paste "paint" the contact surfaces of the semiconductor, must a thin layer (ideally 50µ to 100µ).

4-Place the device onto the heat sink.

5-Assemble the clamp connecting the heat sinks.

6-Tighten the bolts alternatively with a wrench until the nut contacts the washer, ensure that clamps head is perfectly aligned with the heat sink.

7-Tighten nuts alternately by 1/8 turn, checking the pressure indicator tab each time until just turns free. Then tighten the nut opposite to the side that last released 1/8 of a turn.

8-Check again the pressure indicator after 30 minutes. If necessary, tighten slightly.

WARNING

Do not over-tighten. If it occurs, completely loosen the clamp, allow the clamp spring washers to relax for 1/2 hour and proceed to re-tighten it. Make sure that the device is not damaged.

Do not move the centre nut of the head clamp, pre-calibrated be lost.

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Your Needs, Our Solutions