

# Power Semiconductor Assemblies

WESTCODE

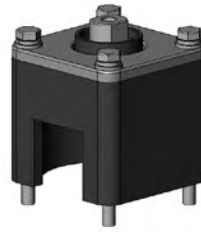
## Capsule Mounting Clamps

The Bar type clamp uses a two rod system with a straight bar spring that is bent over a central point to give the clamping force on the device. This force is achieved when the indicators, metal shims at each end of the clamp, become just trapped. (CMK 9000 uses a disc spring stack).

The Box type clamp uses a four bolt system with disc springs and the correct force on the device is achieved when the bottom of the box just touches the heatsink.

As the force indication is contained within these clamps, special equipment or torque spanners are not required. The clamps can therefore be reset to the correct force at any time, using only a box spanner.

Box clamps are suitable for devices with 19 mm, 25 mm or 34 mm diameter mounting surfaces and of 13.8 mm, 14.6 or 26.2 mm nominal thicknesses respectively.



Bar clamps are suitable for devices with 19 mm to 125 mm diameter mounting surfaces and 450 kgf to 9000 kgf clamping forces.

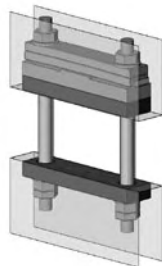
Bar Type	Fixing Centres mm	Rod Size	Capsule Device		
			Outline	Mounting Surface Diameter mm	Nom. Thickness mm
CMK450S56M	65	M8	DO-200AA TO-200AB	19.0	13.8
CMK450D56M					
CMK450DT56M					
CMK550S56M	65	M8	GTO	29.5	16.0
CMK550D56M					
CMK900S56M	65	M8	Diode Thyristor	25.1	14.6
CMK900D56M					
CMK900DT56M					
CMK0600S74M	89	M10	Press-Pack IGBTs	47.0	27.0
CMK0600D74M					
CMK1000S74M	89	M10	Press-Pack IGBTs	47.0	27.0
CMK1000D74M					
CMK1100D76M	89	M10	DO-200AB TO-200AC	34.0	26.2
CMK1130S76M	89	M10	DO-200AB TO-200AC	34.0	26.2
CMK1130D76M					
CMK1130DT76M					
CMK1800S76M	89	M10	Wespack PCT	38.0	14.0
CMK1800D76M					
CMK1800DT76M					
CMK2100S76M*	89	M10	GTO	47.0	27.0
CMK2100D76M*					
CMK2140S76M*	89	M10	DO-200 Thyristor	47.0	26.8
CMK2140D76M*					
CMK2140DT76M*					
CMK2700S76M	89	M10	Wespack PCT	50.0	14.0
CMK2700D76M					
CMK2700DT76M					

Bar Type	Fixing Centres mm	Rod Size	Capsule Device		
			Outline	Mounting Surface Diameter mm	Nom. Thickness mm
CMK2000S114M	132	M12	Press-Pack IGBTs	75.0	26.0
CMK2000D114M					
CMK2500S114M	132	M12	Press-Pack IGBTs	75.0	26.0
CMK2500D114M					
CMK2500S116M*	132	M12	GTO	63.0	26.0
CMK2500D116M*					
CMK3000S116M*	132	M12	DO-200AD Thyristor	63.0	33.0
CMK3000D116M*					
CMK3500S116M*	132	M12	GTO	75.0	26.0
CMK3500D116M*					
CMK4000S116M*	132	M12	Diode Thyristor	73.0	36.8
CMK4000D116M*					
CMK5000D128M*	146	M16	GTO	75.0	26.0
CMK7000D128M*	146	M16	Diode Thyristor	75.0	26.6
CMK3060S140ML	154	M12	Press-Pack IGBTs	85.1	26.0
CMK3060D140ML					
CMK9000S160M*	180	M16	Thyristor	99.3	35.8
CMK9000D160M*					
CMK6120S180ML	196	M16	Press-Pack IGBTs	125.0	26.0
CMK6120D180ML					

\* M for T<sub>J</sub> up to 190°C, ML for T<sub>J</sub> 125°C.

Note: 1 Kgf = 9.8 Newtons

Outline drawings are available from pages O-01...O-24



CMK	XXXX	S, D or DT	XX	N
Capsule Mounting Kit	Nominal Clamping Force Kgf	S-Single side cooled (tapped heatsink) D-Double side cooled (through hole in heatsink) DT-Double side cooled (tapped heatsink)	Maximum Capsule Diameter mm	Metric Fixings M 8, 10 or 12

Bar Type	Fixing Centres mm	Rod Size	Capsule Device		
			Outline	Mounting Surface Diameter mm	Nom. Thickness mm
CMK450B 19M	50 PCD	M5x50 Bolts	DO-200AA TO-200AB	19.0	13.8
CMK450B 25M			Diode Thyristor	25.1	14.6
CMK450B 25M	70 PCD	M6x50 Bolts	DO-200AB TO-200AC	34.0	26.2

Note: 1 Kgf = 9.8 Newtons



CMK	XXXX	B	XX	N
Capsule Mounting Kit	Nominal Clamping Force Kgf	Box Clamp	Capsule Mounting Surface Diameter 19, 25 or 34 mm	Metric Fixing Bolts (See Chart)