

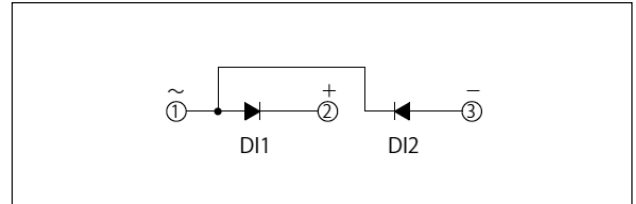
DCA200DB

UL:E76102



Same package as the product in this photo.

$V_{RRM} = 800V, 1600V$
 $I_F(AV) = 200A$

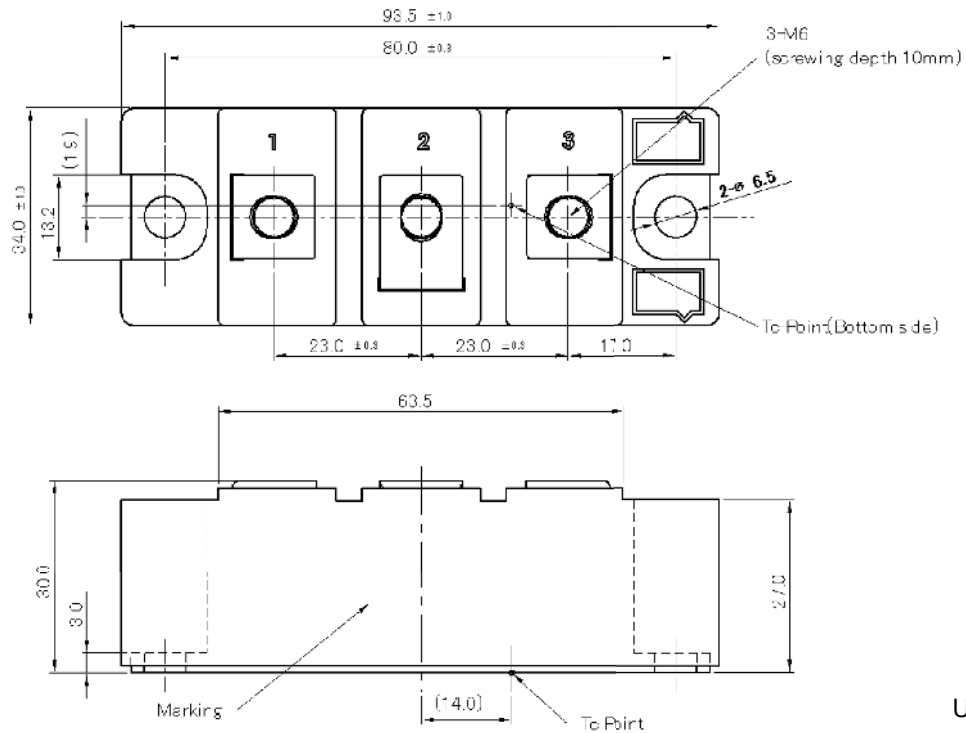


Features and Advantages

- Improved heat dissipation thanks to newly designed low layered internal structure. Possibility to reduce the heatsink.
- Reduces thermal stress on the diode chip thanks to high heat dissipation internal structure, thus improving the long term reliability.
- 20% weight reduction by optimizing the internal design and material.
- Using 100% lead-free solder to protect the environment.

Applications

Motor Drives, Battery Charger, Generator, Elevator, Various Power Supplies



Unit:mm

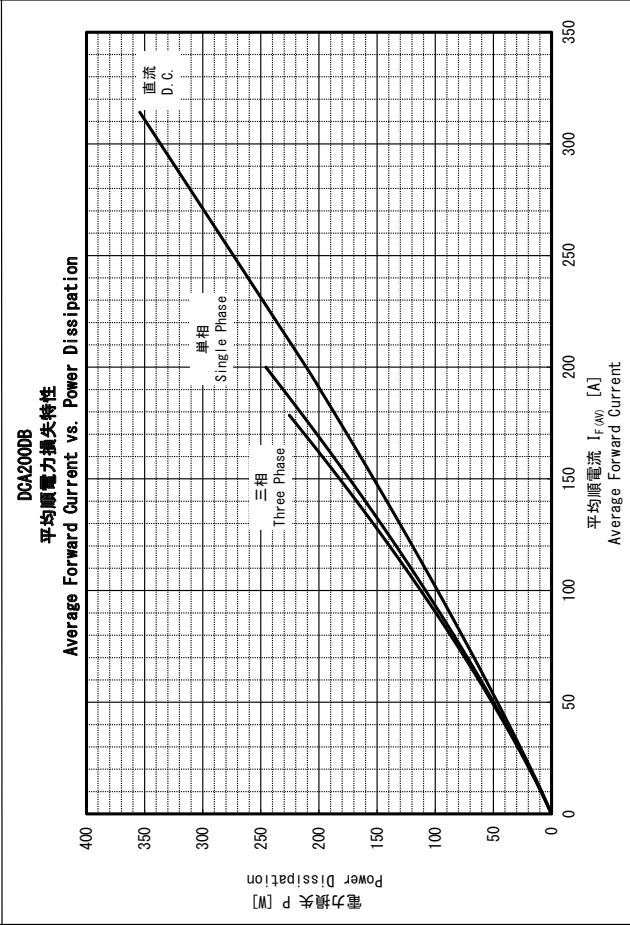
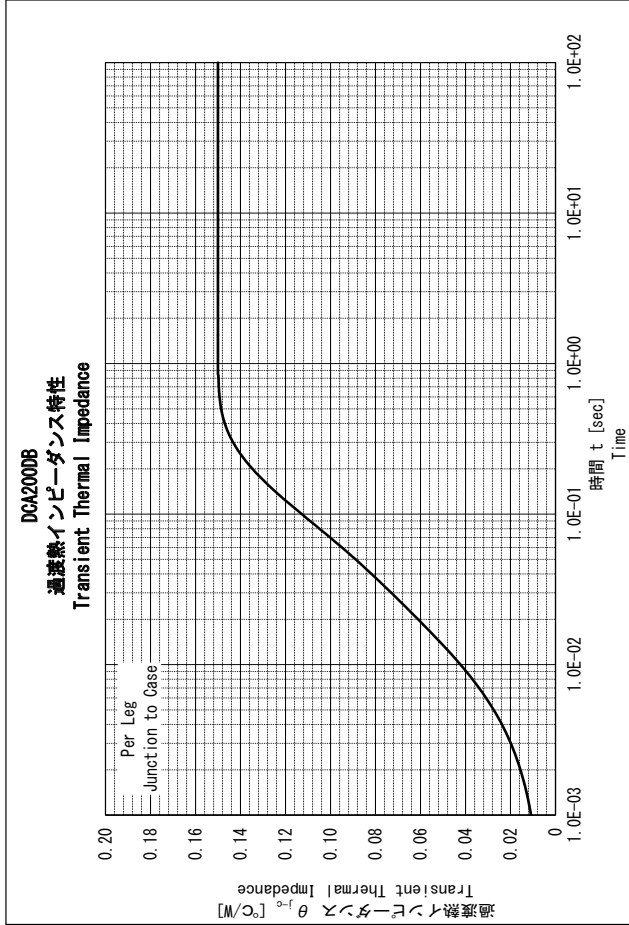
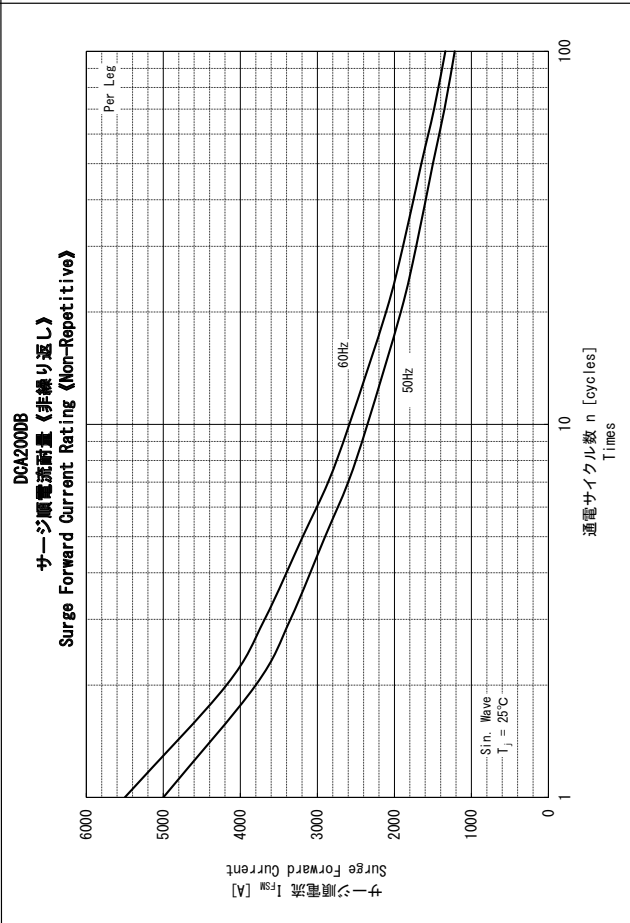
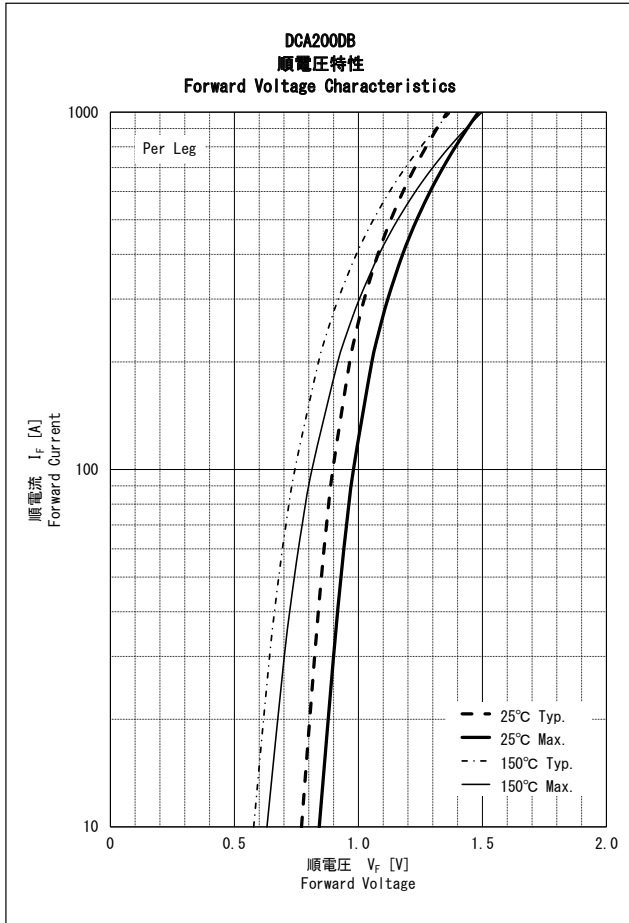
■ Maximum Ratings (T_j=25°C unless otherwise specified)

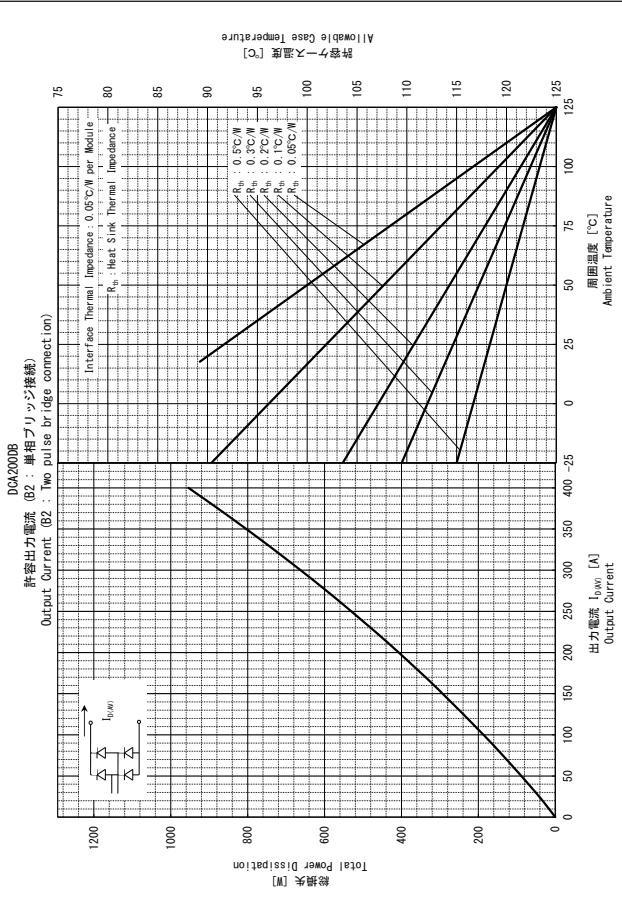
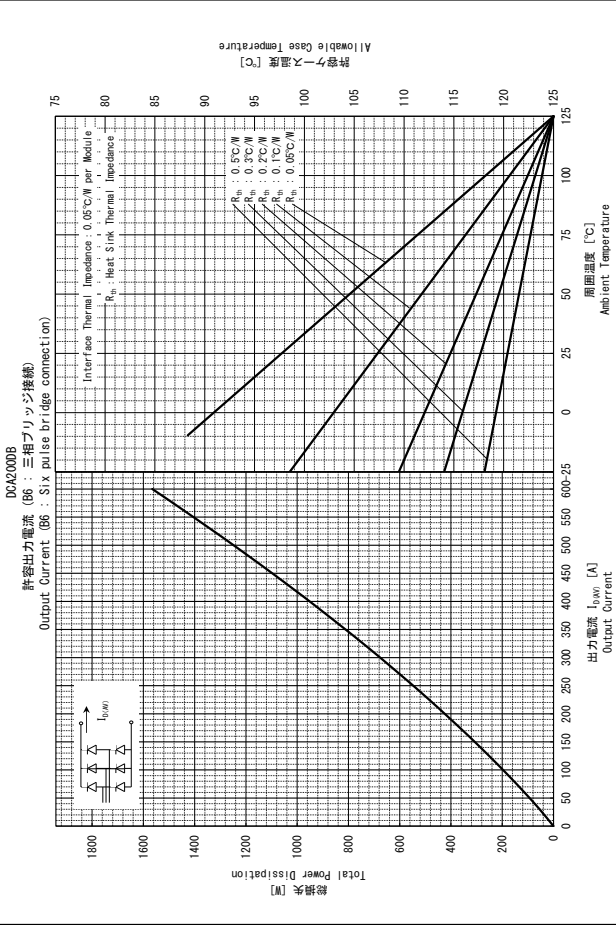
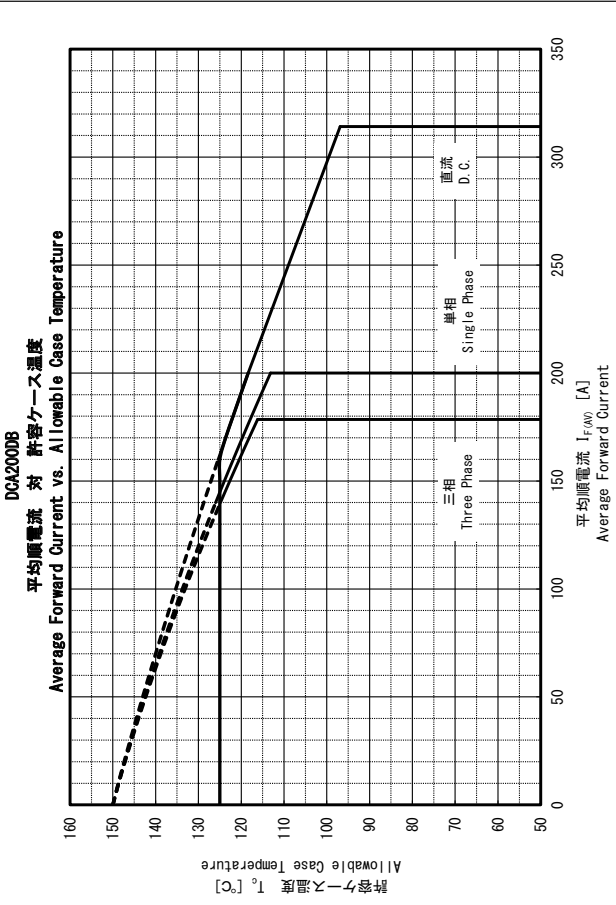
Item	Symbol	Unit	DCA200DB80	DCA200DB160
Repetitive Peak Reverse Voltage	V _{RRM}	V	800	1600
Non-Repetitive Peak Reverse Voltage	V _{RSM}	V	960	1700

Item	Symbol	Unit	Ratings	Conditions
Average Forward Current	I _{F(AV)}	A	200	Sin.180° ,T _c =113°C
R.M.S. Forward Current	I _{F(RMS)}	A	314	Sin.180° ,T _c =113°C
Surge Forward Current	I _{FSM}	A	5000/5500	50/60Hz Sin.Wave,Peak Value,Non-Repertive
I ² t (for fusing)	I ² t	A ² s	125000	50/60Hz Sin.Wave
Isolation Voltage	V _{ISO}	V	2500	AC,RMS,1min
Operating Junction Temperature	T _j	°C	-40~+150	
Storage Temperature	T _{stg}	°C	-40~+125	
Mounting Torque(M6)	-	N·m	4.7	Recommended Value 2.5~3.9 (25~40)
Terminal Torque(M6)	-	(kgf·cm)	4.7	Recommended Value 2.5~3.9 (25~40)
Weight	-	g	180	Typical Value

■ Electrical Characteristics (T_j=25°C unless otherwise specified)

Item	Symbol	Unit	Ratings			Conditions
			Min.	Typ.	Max.	
Reverse Current	I _R	mA		5	50	T _j =T _{jmax} ,V _R =V _{RRM} ,Per Leg
Forward Voltage	V _F	V		1.18	1.3	I _F =620A,Per Leg
Threshold Voltage	V _(TO)	V			0.94	T _j =25°C
					0.76	T _j =T _{jmax}
Forward Slope Resistance	r _T	mΩ			0.58	T _j =25°C
					0.78	T _j =T _{jmax}
Thermal Resistance	R _{th(j-c)}	°C/W			0.13	Junction to Case (Per Leg)
					0.065	0.075
	R _{th(c-f)}	°C/W			0.10	Case to Fin (Per Module) Thermal conductivity (Si grease) =9×10 ⁻³ [W/cm·°C]





<Attention>

- Although we make every effort to improve quality and reliability, semiconductor products may fail or malfunction due to various factors. When using this product, safety measures should be taken for the equipment on which the product will be used, such as redundancy design, design for prevention of the spread of fire, design for prevention of malfunction, etc. in which safety is taken into consideration, so that no accident resulting in personal injury or death, or no damages due to fire, will occur.
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- Do not use the product for purposes of development, etc. of weapons of mass destruction or for purposes of military utilization, etc.
- Consult us if you have any questions about the product.

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