

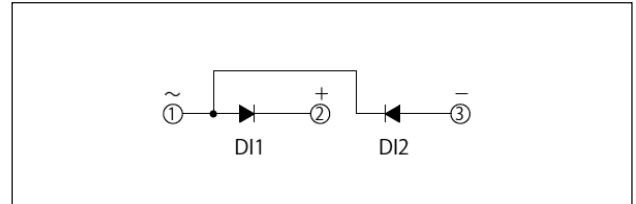
DCA240EB

UL:E76102



Same package as the product in this photo.

$V_{RRM} = 800V, 1600V$
 $I_F(AV) = 240A$

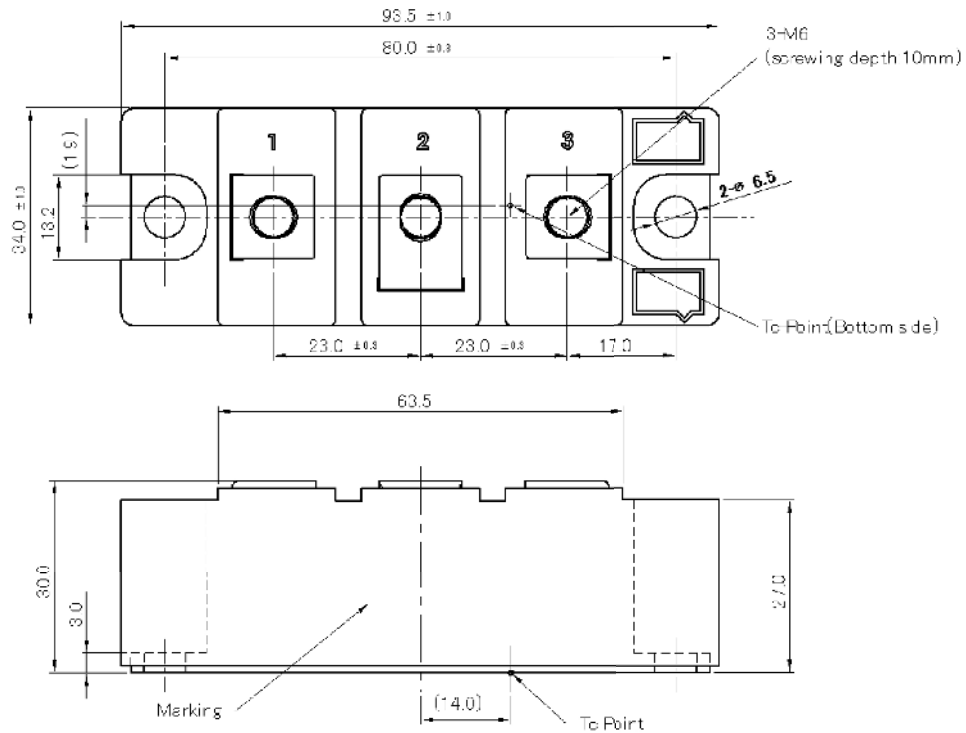


Features and Advantages

- Improved heat dissipation thanks to newly designed low layered internal structure and special material for insulation layer, offering easy thermal design for equipment.
- 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

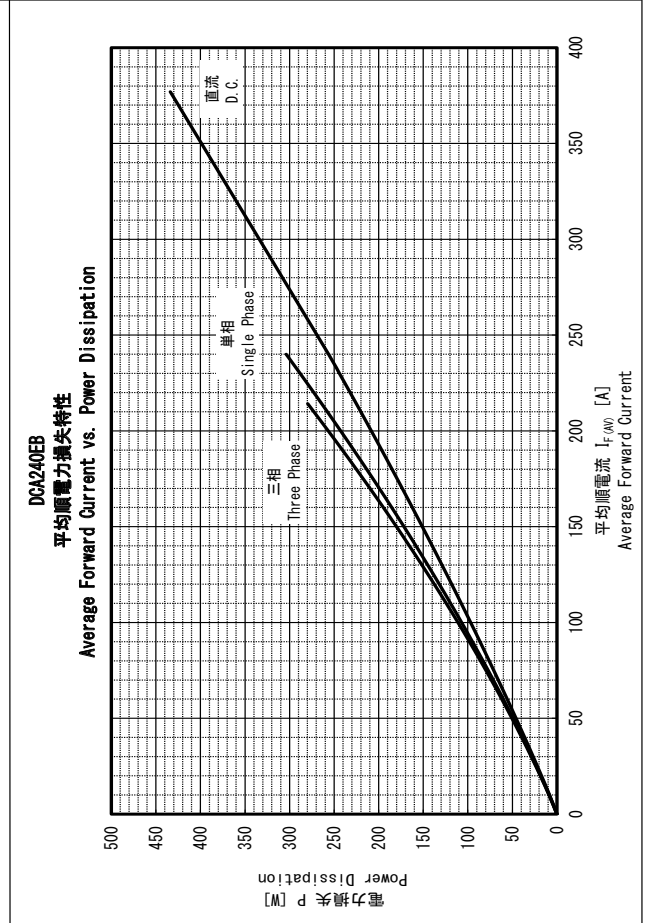
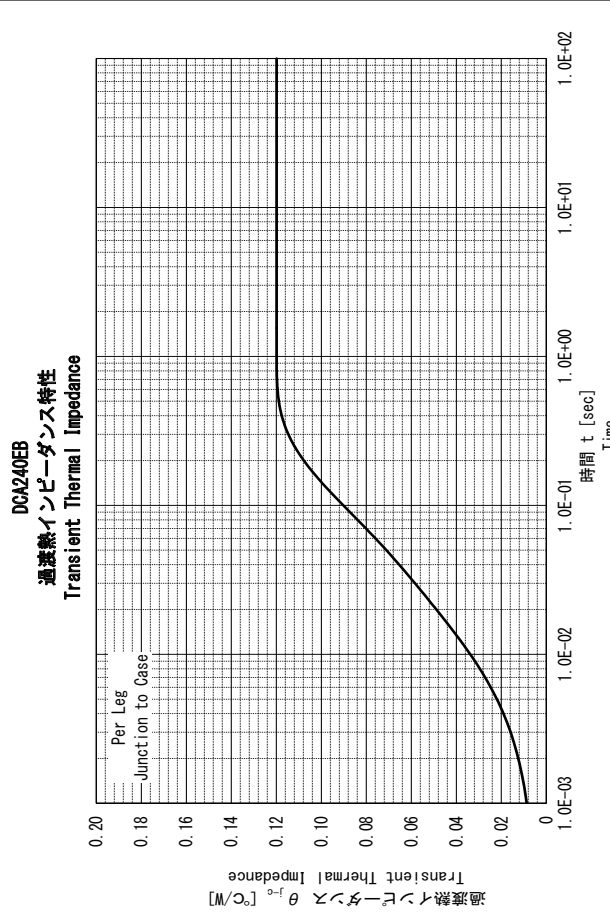
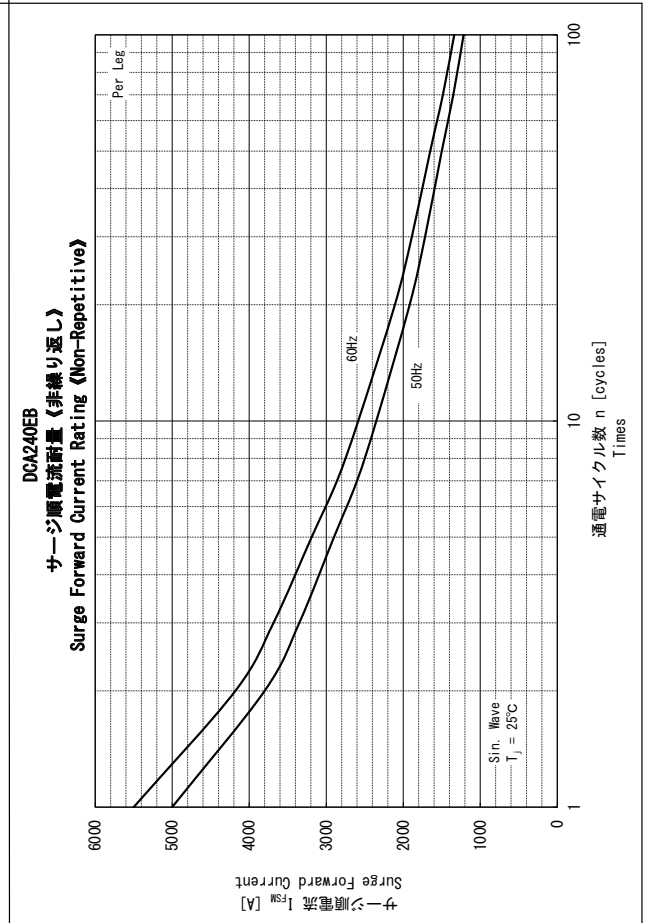
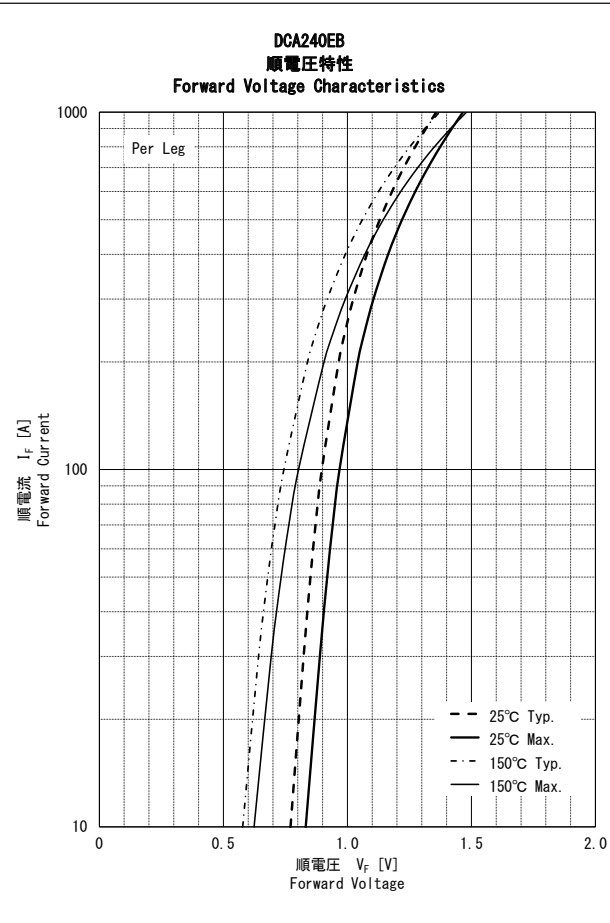
■ Maximum Ratings (T_j=25°C unless otherwise specified)

Item	Symbol	Unit	DCA240EB80	DCA240EB160
Repetitive Peak Reverse Voltage	V _{RRM}	V	800	1600
Non-Repetitive Peak Reverse Voltage	V _{RSM}	V	960	1700

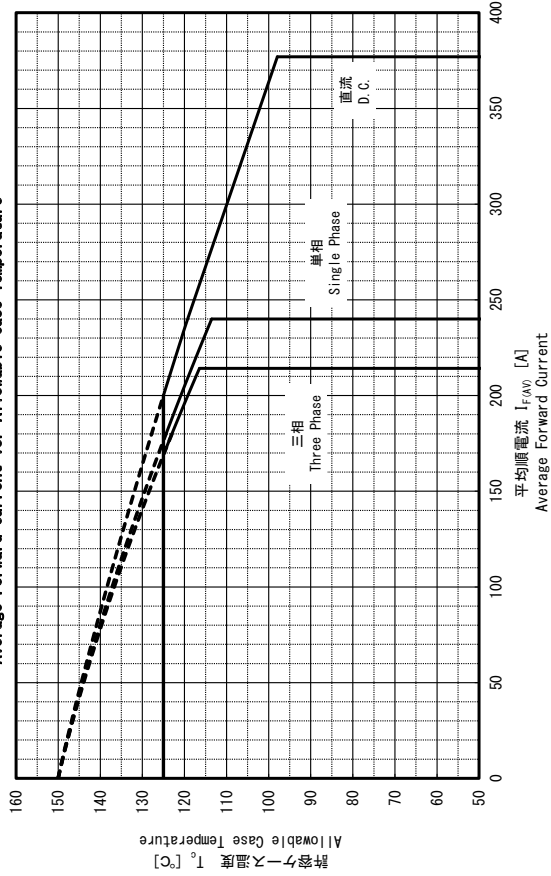
Item	Symbol	Unit	Ratings	Conditions
Average Forward Current	I _{F(AV)}	A	240	Sin.180° ,T _c =113°C
R.M.S. Forward Current	I _{F(RMS)}	A	377	Sin.180° ,T _c =113°C
Surge Forward Current	I _{FSM}	A	5000/5500	50/60Hz Sin.Wave,Peak Value,Non-Repetitive
I ² t (for fusing)	I ² t	A ² s	125000	50/60Hz Sin.Wave
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)

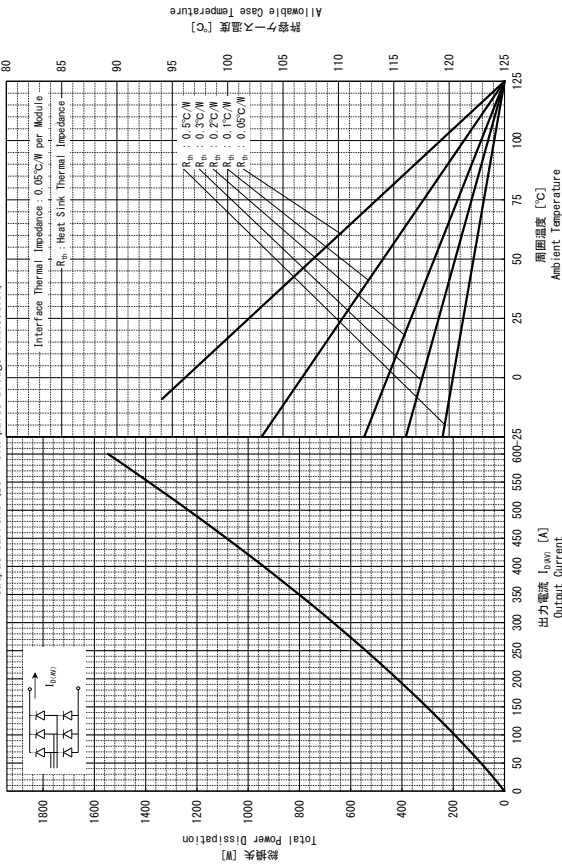
Item	Symbol	Unit	Ratings			Conditions
			Min.	Typ.	Max.	
Reverse Current	I _R	mA		5	50	T _j =T _{jmax} , V _R =V _{RRM} , Per Leg
Forward Voltage	V _F	V		1.25	1.35	I _F =750A, Per Leg
Threshold Voltage	V _(TO)	V			0.93	T _j =25°C
					0.76	T _j =T _{jmax}
					0.55	T _j =25°C
Forward Slope Resistance	r _T	mΩ			0.74	T _j =T _{jmax}
					0.08	Junction to Case (Per Leg)
Thermal Resistance	R _{th(j-c)}	°C/W			0.06	Junction to Case (Per Module)
					0.10	Case to Fin (Per Module)
	R _{th(c-f)}	°C/W				Thermal conductivity (Si grease) =9×10 ⁻³ [W/cm·°C]



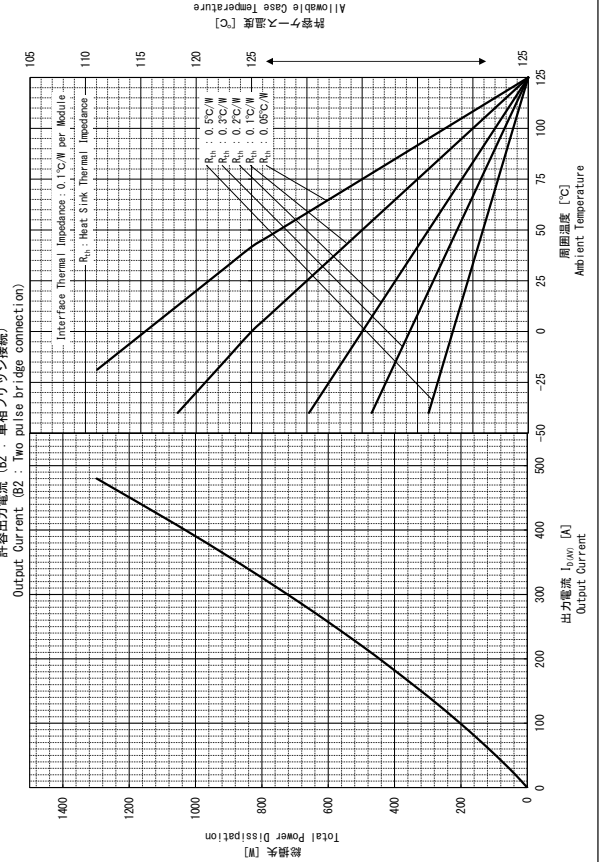
DCA240EB
平均順電流 対 許容ケース温度
Average Forward Current vs. Allowable Case Temperature



DCA240EB
許容出力電流 (B6 : 三相ブリッジ接続)
Output Current (B6 : Six pulse bridge connection)



DCA240EB
許容出力電流 (B2 : 単相ブリッジ接続)
Output Current (B2 : Two pulse bridge connection)



<Attention>

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