DIODE MODULE
DD(KD)100HB120/160

Power Diode Module **DD100HB** series are designed for various rectifier circuits. **DD100HB** has two diode chips connected in series and the mounting base is elctrically isolated from elements for simple heatsink construction. Wide voltage rating up to, 1,600V is avaiable for various input voltage.

- Isolated mounting base
- Two elements in a package for simple (single and three phase) bridge connections
- Highly reliable glass passivated chips
- High surge current capability

（**Applications**）
Various rectifiers, Battery chargers, DC motor drives

Unit：mm
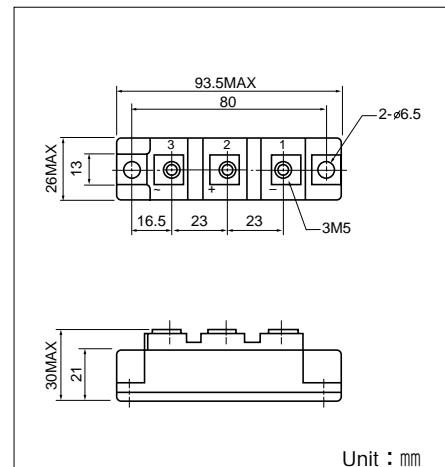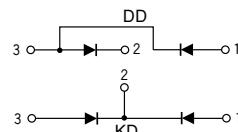
■Maximum Ratings

（Tj＝25℃ unless otherwise specified）

Symbol	Item	Ratings		Unit
		DF100HB120	DD100HB160	
V$_{RRM}$	Repetitive Peak Reverse Voltage	1200	1600	V
V$_{RSM}$	Non-Repetitive Peak Reverse Voltage	1350	1700	V

Symbol	Item		Conditions	Ratings	Unit
I$_{F(AV)}$	Average Forward Current		Single phase, half wave, 180° conduction, Tc：111℃	100	A
I$_{F(RMS)}$	R.M.S. Forward Current		Single phase, half wave, 180° conduction, Tc：111℃	155	A
I$_{FSM}$	Surge Forward Current		½ cycle, 50/60Hz, peak value, non-repetitive	1800/2000	A
I^{2}t	I^{2}t		Value for one cycle of surge current	16500	A^{2}S
Tj	Junction Temperature			−40 to ＋150	℃
Tstg	Storage Temperature			−40 to ＋125	℃
V$_{ISO}$	Isolation Voltage		A.C.1minute	2500	V
	Mounting Torque	Mounting (M6)	Recommended Value 2.5-3.9 （25-40）	4.7 （48）	N·m (kgf·cm)
		Terminal (M5)	Recommended Value 1.5-2.5 （15-25）	2.7 （28）	
	Mass			170	g

■Electrical Characteristics

Symbol	Item	Conditions	Ratings	Unit
I$_{RRM}$	Repetitive Peak Reverse Current, max.	at V$_{DRM}$, single phase, half wave. Tj＝150℃	30	mA
V$_{FM}$	Forward Voltage Drop, max.	Foward current 320A，Tj＝25℃，Inst. measurement	1.35	V
Rth(j-c)	Thermal Impedance, max.	Junction to case	0.30	℃/W

Maximum Forward Characteristics
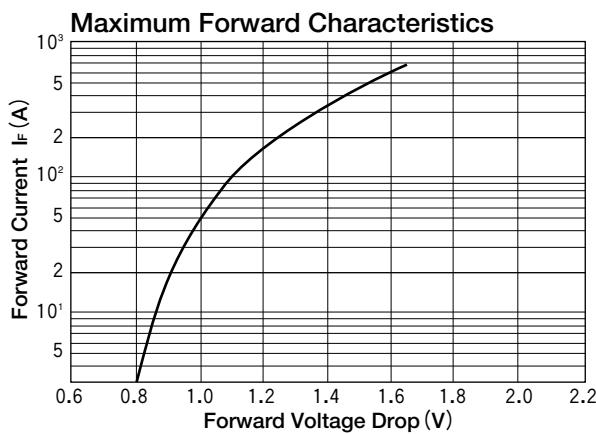
Average Forward Current vs. Power Dissipation

Average Forward Current vs. Allowable Case Temperature
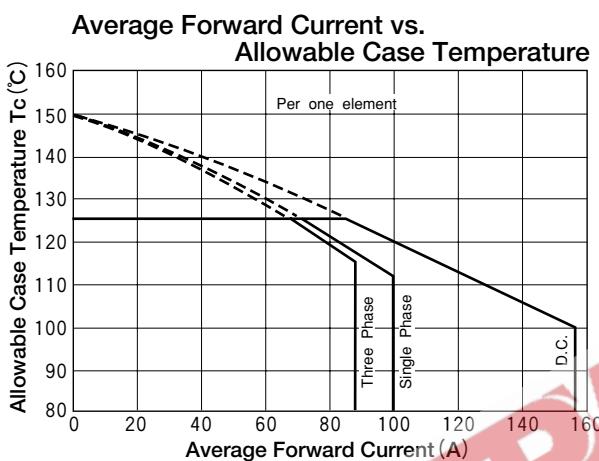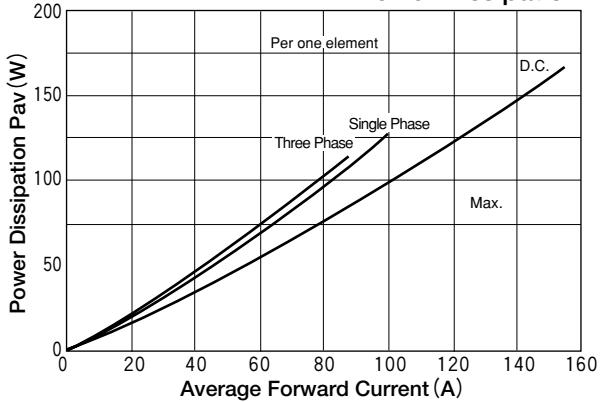
Cycle Surge Forward Current Rating (Non-Repetitive)

Transient Thermal Impedance

Output Current — B2；Two Pluse Bridge connection

Output Current — B6；Six pulse Bridge connection

SanRex 50 Seaview Blvd. Port Washington, NY 11050-4618 PH.(516)625-1313 FAX(516)625-8845 E-mail: semi@sanrex.com