

DIODE MODULE

DD(KD)60GB40/80

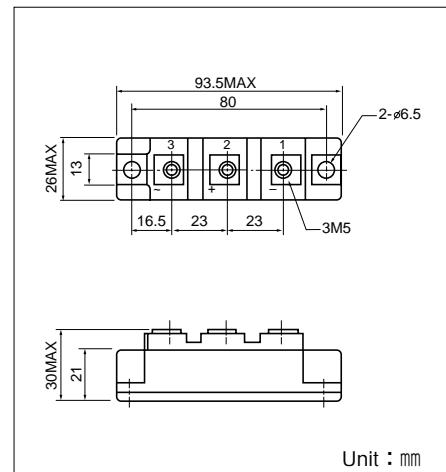
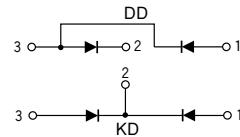
UL:E76102(M)

Power Diode Module **DD60GB** series are designed for various rectifier circuits. **DD60GB** has two diode chips connected in series and the mounting base is electrically isolated from elements for simple heatsink construction. Wide voltage rating up to, 800V is available 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



■ Maximum Ratings

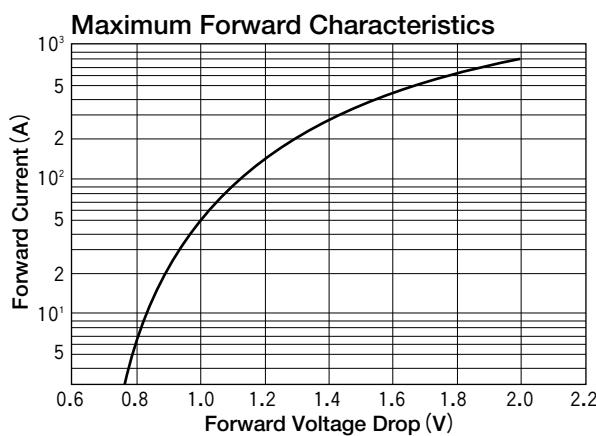
($T_j=25^\circ\text{C}$ unless otherwise specified)

Symbol	Item	Ratings		Unit
		DD60GB40	DD60GB80	
V_{RRM}	Repetitive Peak Reverse Voltage	400	800	V
V_{RSM}	Non-Repetitive Peak Reverse Voltage	480	960	V

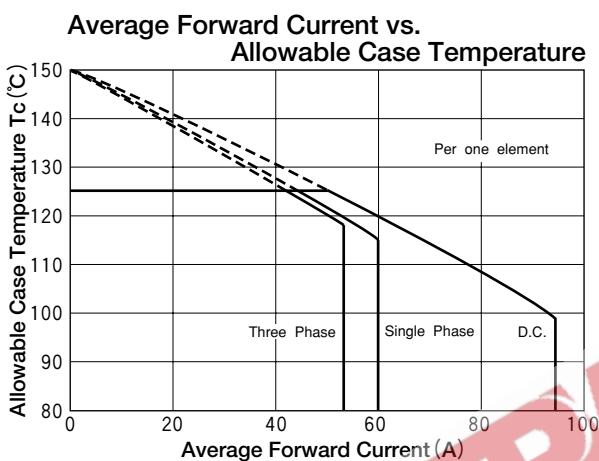
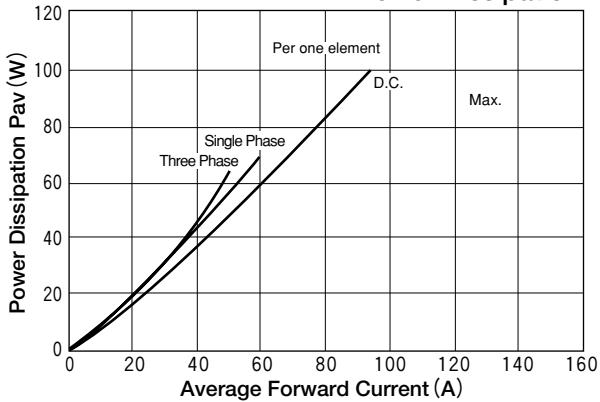
Symbol	Item	Conditions	Ratings	Unit
$I_F(AV)$	Average Forward Current	Single phase, half wave, 180° conduction, $T_c : 114^\circ\text{C}$	60	A
$I_F(RMS)$	R.M.S. Forward Current	Single phase, half wave, 180° conduction, $T_c : 114^\circ\text{C}$	95	A
I_{FSM}	Surge Forward Current	$\frac{1}{2}$ cycle, 50/60Hz, peak value, non-repetitive	1100/1200	A
I^2t	I^2t	Value for one cycle of surge current	6000	A^2s
T_j	Junction Temperature		-40 to +150	$^\circ\text{C}$
T_{stg}	Storage Temperature		-40 to +125	$^\circ\text{C}$
V_{iso}	Isolation Voltage	A.C.1minute	2500	V
M_t	Mounting (M6)	Recommended Value 2.5-3.9 (25-40)	4.7 (48)	$\text{N}\cdot\text{m}$ (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. $T_j=150^\circ\text{C}$	20	mA
V_{FM}	Forward Voltage Drop, max.	Forward current 180A, $T_j=25^\circ\text{C}$, Inst. measurement	1.25	V
$R_{th(j-c)}$	Thermal Impedance, max.	Junction to case	0.50	$^\circ\text{C}/\text{W}$



Average Forward Current vs.
Power Dissipation



Cycle Surge Forward Current Rating
(Non-Repetitive)

