DIODE MODULE

DD25F/KD25F

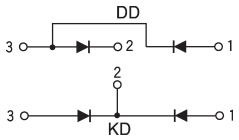
UL;E76102 (M)

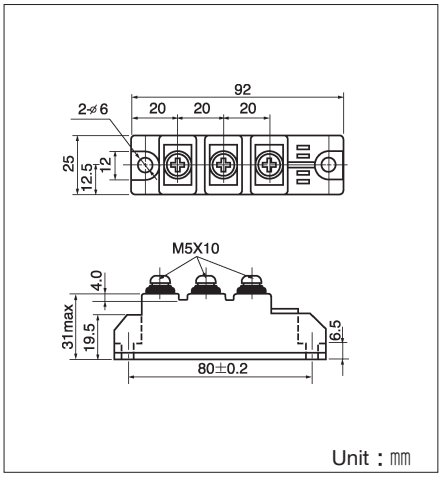
Power Diode Module **DD25F** series are designed for various rectifier circuits. **DD25F** has two diode chips connected in series in 25mm (1inch) width package and the mounting base is elctrically isolated from elements for simple heatsink construction. Wide voltage rating up to, 1,600V is avaiable 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





■Maximum Ratings

(Tj=25℃)

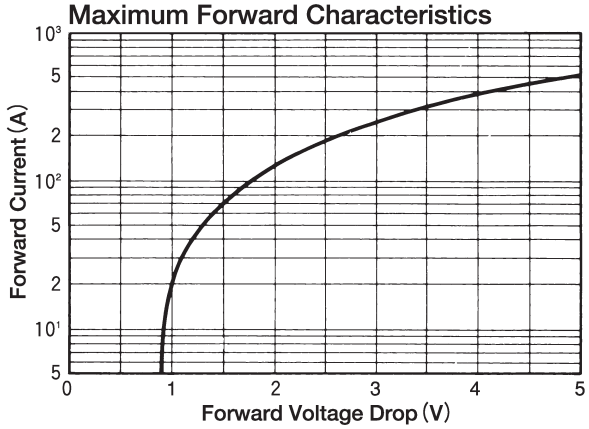
Symbol	Item	Ratings				Unit
		DD25F40	DD25F80	DD25F120	DD25F160	
V_{RRM}	Repetitive Peak Reverse Voltage	400	800	1200	1600	V
V_{RSM}	Non-Repetitive Peak Reverse Voltage	480	960	1300	1700	V

Symbol	Item		Conditions	Ratings	Unit
$I_{F(AV)}$	Average Forward Current		Single phase, half wave, 180˚conduction, Tc : 96℃	25	A
$I_{F(RMS)}$	R.M.S. Forward Current		Single phase, half wave, 180˚conduction, Tc : 96℃	39	A
I_{FSM}	Surge Forward Current		½cycle, 50/60Hz, peak Value, non-repetitive	530/580	A
I^2t	I^2t		Value for one cycle of surge current	1400	A^2S
V_{ISO}	Isolation Breakdown Voltage (R.M.S.)		A.C.1minute	2500	℃
Tj	Junction Temperature			−40～+125	℃
Tstg	Storage Temperature			−40～+125	V
	Mounting Torque	Mounting (M5)	Recommended Value 1.5～2.5 (15～25)	2.7 (28)	N·m (kgf·cm)
		Terminal (M5)	Recommended Value 1.5～2.5 (15～25)	2.7 (28)	
	Mass			170	g

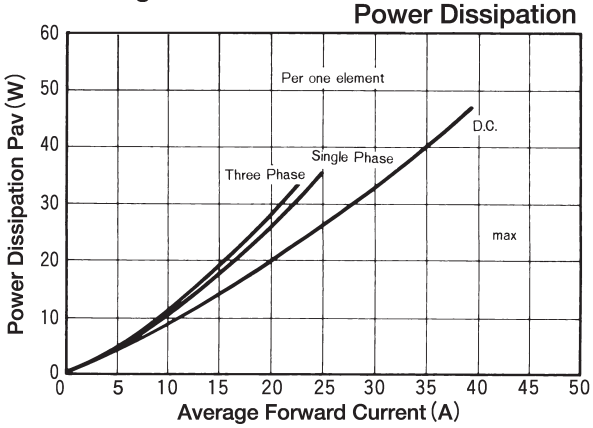
■Electrical Characteristics

Symbol	Item	Conditions	Ratings	Unit
I_{RRM}	Repetitive Peak Reverse Current, max.	at V_{DRM}, single phase, half wave. Tj=125℃	10	mA
V_{FM}	Forward Voltage Drop, max.	Forward current 75A, Tj=25℃, Inst. measurement	1.55	V
Rth(j-c)	Thermal Impedance, max.	Junction to case	0.78	℃/W

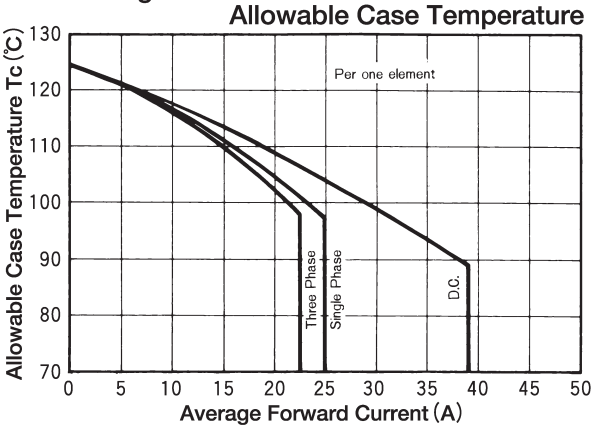
Maximum Forward Characteristics



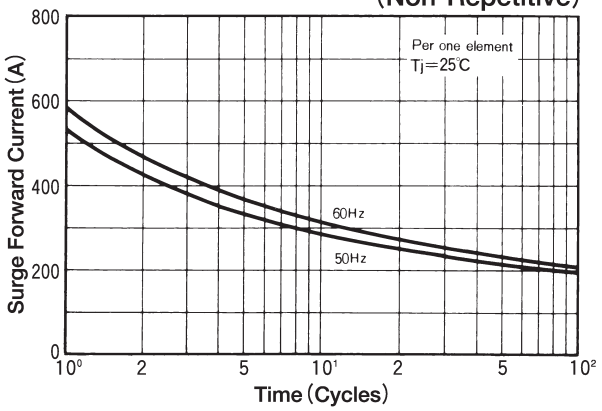
Average Forward Current vs. Power Dissipation



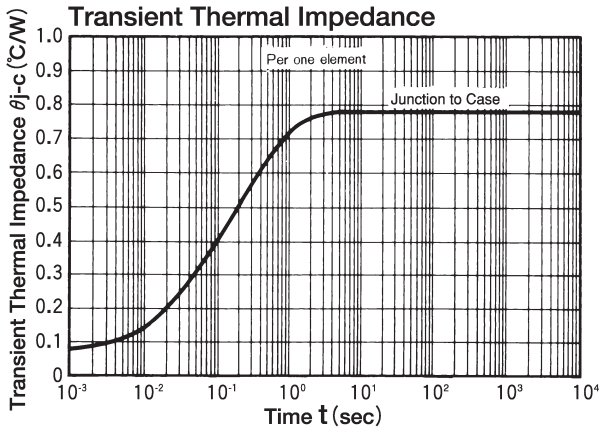
Average Forward Current vs. Allowable Case Temperature



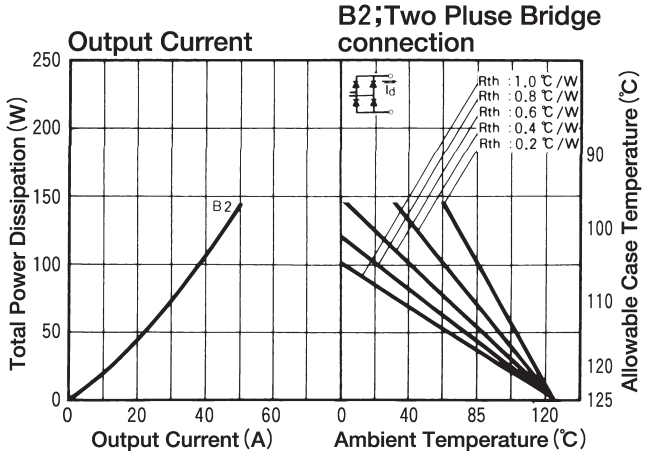
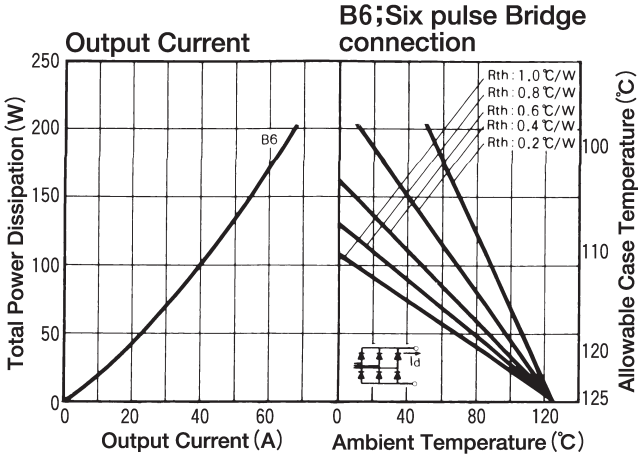
Cycle Surge Forward Current Rating (Non-Repetitive)



Transient Thermal Impedance



Output Current — B2;Two Pluse Bridge connection



Output Current — B6;Six pulse Bridge connection