DIODE MODULE (NON-ISOLATED TYPE)

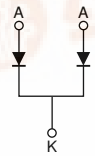
DKR200AB60

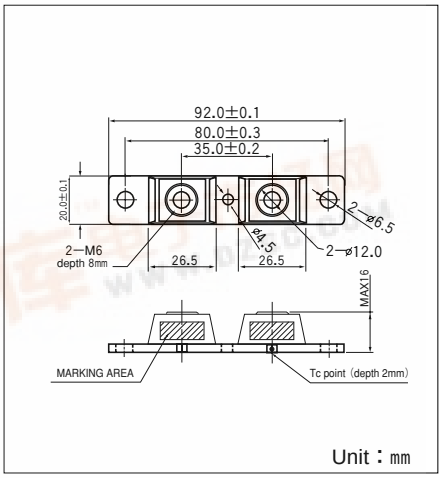
DKR200AB60 is a high speed (fast recovery) dual diode module designed for high power switching application. **DKR200AB60** is suitable for high frequency application requiring low loss and high speed control.

- High Speed Diode $t_{rr} \leqq 200ns$
- $I_{F(AV)}$=100A (each device)
- High Surge Capability

(Applications)

Switching Power Supply, Inverter Welding Power Supply
Power Supply for Telecommunication





■Maximum Ratings

(Tj=25℃ unless otherwise specified)

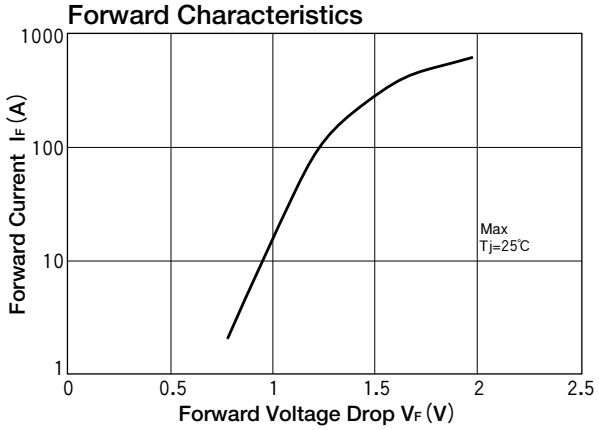
Symbol	Item	Ratings	Unit
		DKR200AB60	
V_{RRM}	Repetitive peak reverse Voltage	600	V
$V_{R(DC)}$	D.C. Reverse Voltage	480	V

Symbol	Item		Condition	Ratings	Unit
I_F	Forward Current	Per module	D.C. T_C=133℃	200	A
		Per leg		100	
I_{FSM}	Surge Forward Current		1/2cycle, 60Hz, Peak value. non-repetitive	3600	A
			1/2cycle, 50Hz, Peak value. non-repetitive	3200	
I^2t	I^2t (for fusing)		Value for one cycle surge current	54000	A^2S
Tj	Operating Junction Temperature			−40 to +150	℃
Tstg	Storage Temperature			−40 to +125	℃
	Mounting Torque	Mounting (M6)	Recommended Value 25-40	48	(kgf·cm)
			Recommended Value 2.5-3.9	4.7	N·m
		Mounting (M4)	Recommended Value 10-14	15	(kgf·cm)
			Recommended Value 1.0-1.4	1.5	N·m
		Terminal (M6)	Recommended Value 25-40	48	(kgf·cm)
			Recommended Value 2.5-3.9	4.7	N·m
	Mass		Typical Value	80	g

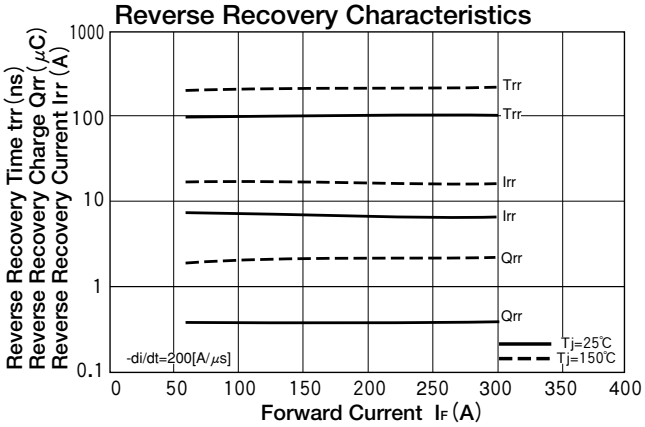
■Electrical Characteristics

Symbol	Item	Condition	Ratings			Unit
			Min.	Typ.	Max.	
I_{RRM}	Repetitive Peak Reverse Current	Tj=125℃, V_D=V_{RRM}			200	mA
V_{FM}	Forward Voltage Drop	I_F=200A, Inst.measurement			1.4	V
trr	Reverse Recovery Time	I_F=200A, −di/dt=200A/μs		100	200	ns
Rth(j-c)	Thermal Impedance	Junction to case, 1/2module			0.063	℃/W

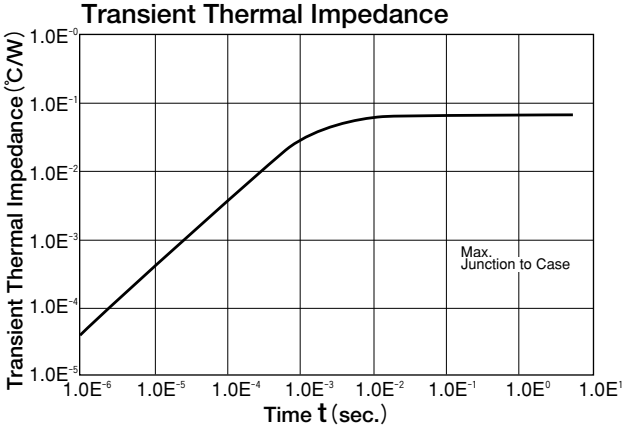
Forward Characteristics



Reverse Recovery Characteristics



Transient Thermal Impedance



Reverse Recovery Characteristics