

DIODE MODULE (NON-ISOLATED TYPE)

DKR400AB60

DKR400AB60 is a high speed (fast recovery) dual diode module designed for high power switching application. DKR400AB60 is suitable for high frequency application requiring low loss and high speed control.

● High Speed Diode $t_{rr} \leq 200\text{ns}$

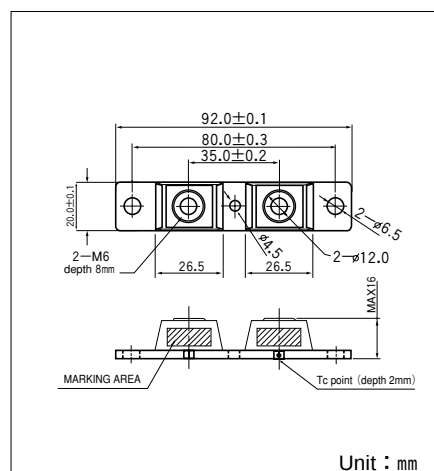
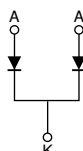
● $I_{F(AV)}=200\text{A}$ (each device)

● High Surge Capability

(Applications)

Switching Power Supply, Inverter Welding Power Supply

Power Supply for Telecommunication



Maximum Ratings

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

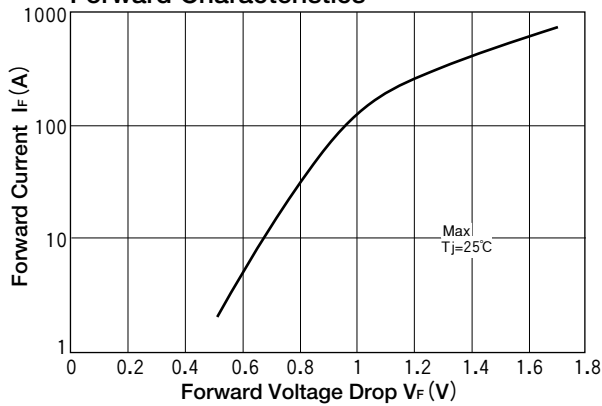
Symbol	Item	Ratings	Unit
		DKR400AB60	
V_{RRM}	Repetitive peak reverse Voltage	600	V
$V_R(DC)$	D.C. Reverse Voltage	480	V

Symbol	Item		Condition	Ratings	Unit
I _F	Forward Current	Per module	D.C. T _c =122℃	400	A
		Per leg		200	
I _{FSM}	Surge Forward Current		½cycle, 60Hz, Peak value. non-repetitive	6000	A
			½cycle, 50Hz, Peak value. non-repetitive	5400	
I ² t	I ² t (for fusing)		Value for one cycle surge current	150000	A²S
T _j	Operating Junction Temperature			－40 to ＋150	℃
T _{stg}	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

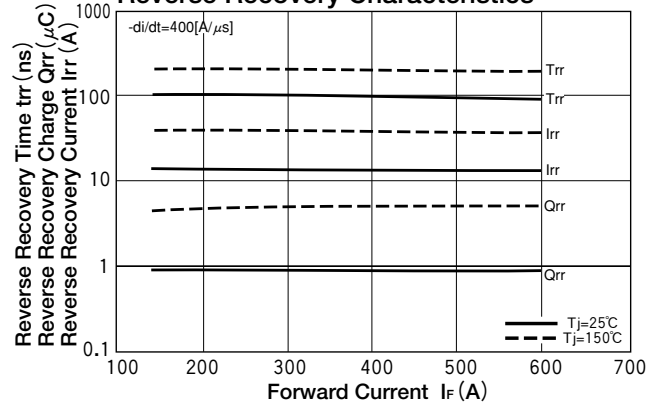
Electrical Characteristics

Symbol	Item	Condition	Ratings			Unit
			Min.	Typ.	Max.	
I_{RRM}	Repetitive Peak Reverse Current	$T_j=125^\circ\text{C}$, $V_D=V_{RRM}$			300	mA
V_{FM}	Forward Voltage Drop	$I_F=400\text{A}$, Inst.measurement			1.4	V
t_{rr}	Reverse Recovery Time	$I_F=400\text{A}$, $-di/dt=400\text{A}/\mu\text{s}$		100	200	ns
$R_{th(j-c)}$	Thermal Impedance	Junction to case, $\frac{1}{2}$ module			0.05	$^\circ\text{C}/\text{W}$

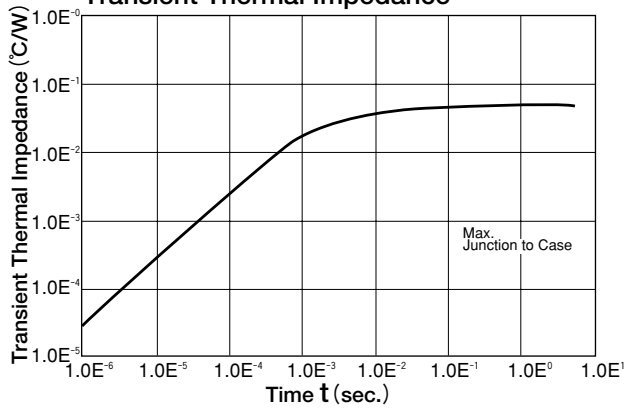
Forward Characteristics



Reverse Recovery Characteristics



Transient Thermal Impedance



Reverse Recovery Characteristics

